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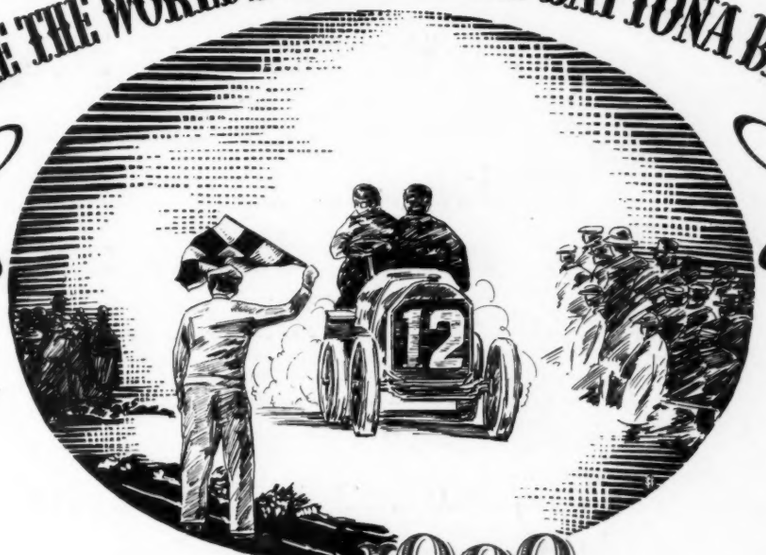

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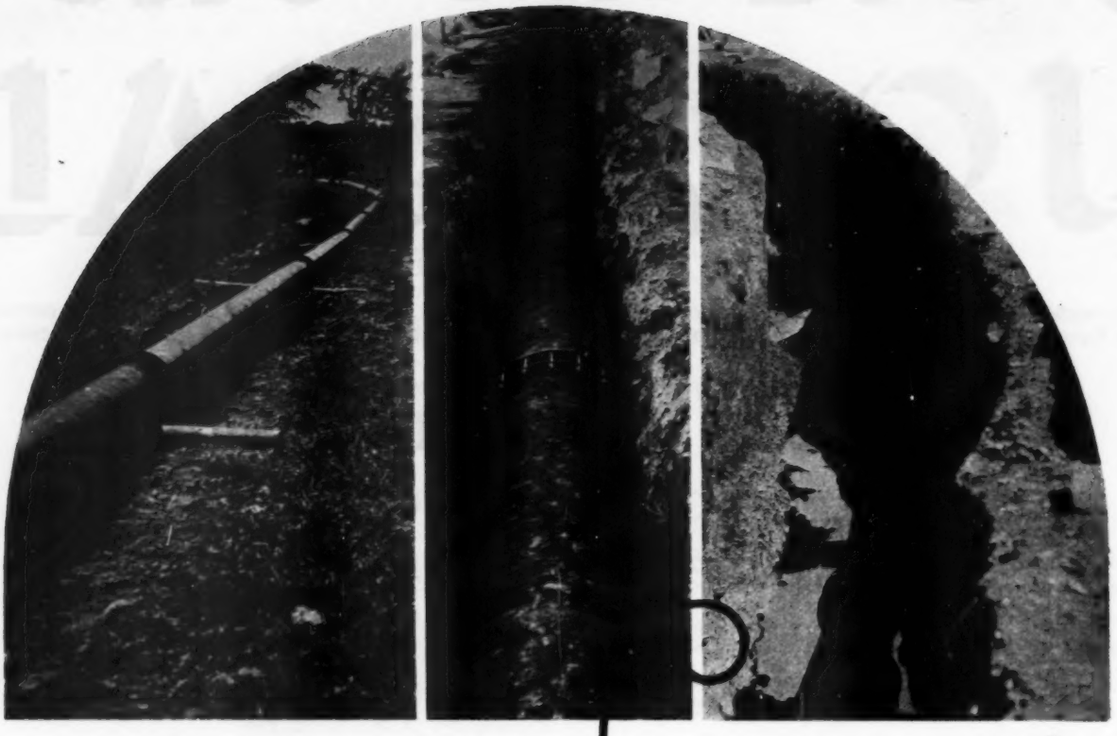

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DRESSER COUPLINGS

Efforts to Curb Overproduction Show Results With Outlook Improved

By ANDREW M. ROWLEY

ANNOUNCEMENT OF ORDERS for a substantial reduction in allowable crude oil production in Oklahoma during August, following tangible evidence that authorities of Texas mean to hold output there to consumer requirements, together with a constructive proration program worked out in California and the fact Kansas will reduce its production during August, further strengthened confidence regarding the outlook for stability of the crude oil price structure. While these events were being recorded other factors having an important bearing on the future were being disclosed. Potentials being taken in the Lucien Pool in Oklahoma showed a reduction of 42 per cent from potentials taken last January and operators were showing concern over the rapid decline in output in certain sections of Kansas.

While much remains to be done in California a plan has been formulated there to become effective upon signature of 95 per cent of the producers and when a supplementary agreement by the pipe line companies is approved by the Federal Court, through which the state's allowable production will be held to consumer demand and purchases restricted to allowables at average posted prices.

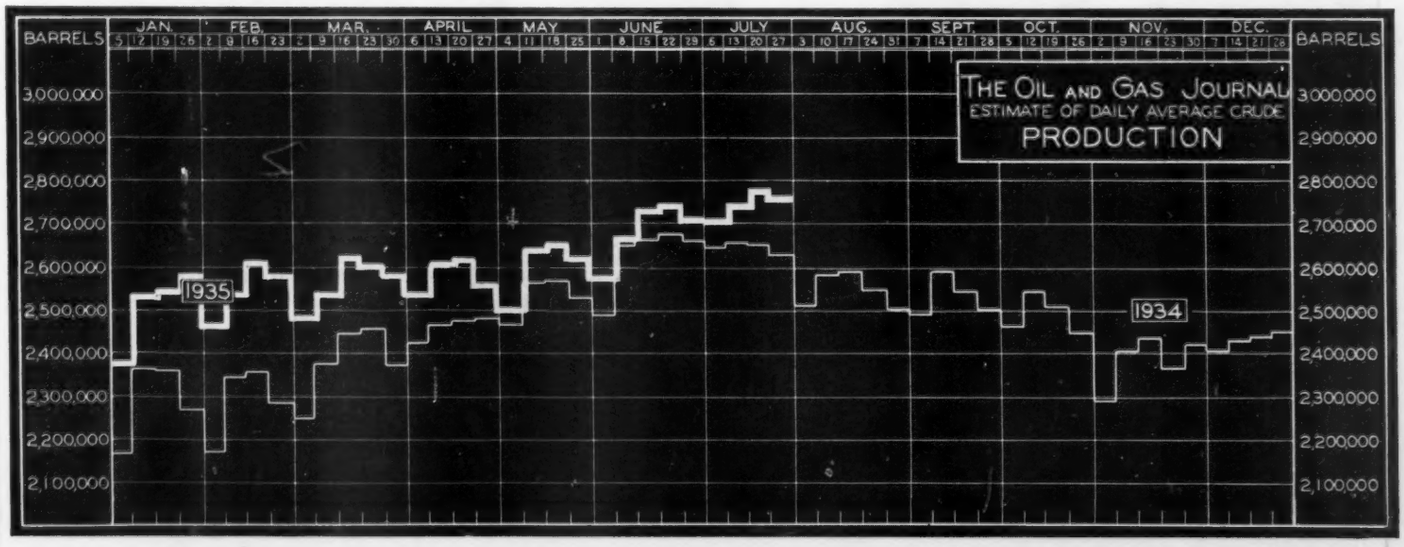
There has been a definite improvement in the situation and published reports emanating from Washington to the effect large companies are making heavy withdrawals of crude from storage so they may be in position to refill such storage with cheap crude, figuring prices will be reduced later in the year, are regarded as pure fabrication or based upon ignorance. Large companies have had too much experience with the high cost of holding crude oil in storage. They have been anxious to reduce stocks as it costs from 18 to 20 cents per barrel, per year, to keep crude in storage.

Field operations continue at a high level as companies are making every effort to increase their known reserves. A well in Liberty County, Texas which flowed 20 barrels, per hour, of 36.8 gravity oil, is regarded as a possible new pool opener while another dome may have been opened in Galveston County by a test making a large quantity of gas and some distillate. In Southwest Texas a test in Goliad County showed 270 feet of oil on a 15-minute drill stem test. In Michigan a wildcat in Geneva Township, Isabella County gives promise of being a 75-barrel producer.

Production 2,746,803, Decrease 19,686

Estimated daily average production for the week ending July 27, a comparison with previous week and one year ago follows:

	July 27	July 20	July 28, 1934
Oklahoma—			
Oklahoma City	152,325	158,350	154,595
Seminole-St. Louis	104,025	102,400	99,050
Remainder of State	267,600	261,500	238,085
Total Oklahoma	523,950	522,250	491,730
East Texas—			
Lathrop	163,328	170,330	230,340
Kilgore	156,127	162,727	167,420
Joiner	153,622	160,813	149,390
Total East Texas	473,077	493,870	547,150
West Texas	156,754	156,154	141,265
North Central Texas	84,684	84,653	92,448
Texas Panhandle	61,827	65,674	62,754
East Central Texas	50,453	50,125	51,550
Gulf Coast—Texas	188,783	189,983	170,405
Southwest Texas	57,527	57,075	56,246
Total State of Texas	1,073,105	1,097,534	1,121,818
Kansas	153,050	149,825	136,755
Louisiana—			
North Louisiana	22,630	22,335	24,555
Gulf Coast—Louisiana	113,894	121,053	73,615
Total Louisiana	136,524	143,388	98,170
Arkansas	30,475	30,410	32,065
Eastern Fields (except Michigan)	106,000	105,500	104,000
Michigan	45,019	45,982	30,616
Rocky Mountain area	111,680	109,350	96,430
California—			
Santa Fe Springs	40,500	41,000	40,700
Long Beach	75,500	75,750	67,000
Mountain View	31,300	27,250	6,150
Elwood	16,500	13,500	11,900
Kettleman Hills	61,100	62,750	72,650
Remainder of State	342,100	342,000	319,850
Total California	567,000	562,250	518,250
Total United States	2,746,803	2,766,489	2,629,834



The Bulletin Board

Bus and Truck regulation bill pending in Congress is of special interest to the oil industry because of its possible effect on the market for motor fuel and motor oils by highway transportation and because the bill fixes hours of labor for private carriers.

Perfection of oil mats constitutes one of the most important developments of the past year in the improvement of roads. Bituminous road surfaces are said to cover now more of the highway mileage classed as "paved" than any other material.

Wagner Labor Act will be set in motion as soon as the National Labor Relations Board is named by the President. Possible effect of the law on the oil industry is engaging attention of oil company counsel who think the measure will be declared unconstitutional.

California operators are forming the Pacific Petroleum Association to make effective a proration plan giving promise of effecting a period of stabilization in California. The new program will go into effect when 95 per cent of all operators approve the agreement. It is in the form of a contract between each oil producer and the association and tentatively for one year.

Natural Gasoline production in the Texas Panhandle will be reduced by about 260,000 gallons daily beginning Thursday of this week, due to provisions of the State's new gas conservation law which becomes effective at that time. Orders on sour gas become effective October 1.

Fitts Pool influence on development has spread over into Texas, jumping the Red River into Grayson County, where a test is to be started soon to reach the Simpson sand series which has proved so prolific in Pontotoc County, Oklahoma. The test will be drilled on the well known Preston Arch and on a 22,000-acre lease block.

High Taxes on gasoline were impressed forcefully on authorities of Texas when the Comptroller's office asked the Attorney General's Department regarding state taxes on confiscated gasoline sold by the state. State and Federal taxes on one sale of 103,000 barrels are $216,300 and the state received only $200,000 from the sale.

Mineral Leasing regulations may be amended by a bill reported by the Senate Committee on Public Lands. Secretary Ickes may postpone expiration limit until bill is acted upon by Congress.

Rotary Drilling is now being used successfully in Michigan to penetrate the thick glacial drift deposits and a number of wells are being drilled by that method in that state instead of cable tools.

Pipe Line construction contracts involving an expenditure of about $2,000,000 have been let by the Lone Star Gas Company for a 109-mile 20-inch line from Anderson County, Texas to Irving, near Dallas.

Pennsylvania operators in the Middle District between Kane and Butler are moving in mass towards methods of secondary recovery, convinced that shock absorbers are better than patience.

Natural Gas waste, due to the popping into the air of an estimated 1,300,000,000 cubic feet daily in the Texas Panhandle, will be eliminated with four-fifths of this wastage affected on August 1, under the new Texas statute providing for utilization of sweet and sour gas.

Engineering methods insure more satisfactory results in developing an adequate supply of good water for oil field operations. There are many factors to be considered in obtaining maximum capacity and minimum investment in permanent equipment.

Power Plants for refineries should be designed with provision for adequate flexibility for wide variations in the steam load and through the correct planning of such units, fuel savings may be substantial compared to operations of the ordinary refinery power plant.

East Texas refiners during the past week increased runs to stills 4,700 barrels daily to a total of 62,200 barrels a day while production of crude oil in the field showed a decline of more than 20,000 barrels a day.

Which Side Is Crazier?

—Drawn Exclusively for The Oil and Gas Journal.

Texas Gas Law Forcing Readjustment in Operation of Three Big Industries

By ANDREW M. ROWLEY

AN EPOCH in the natural gas, natural gasoline and carbon black industries will be marked on August 1 when the recently enacted gas conservation law of the State of Texas becomes effective in so far as its provisions affect sweet gas. Further effects of the new law will be felt October 1 when the section of the law relating to sour gas goes into force.

The immediate effect of the new law on Thursday of this week will be to reduce natural gasoline production in the Panhandle of Texas by 260,000 gallons daily; make unlawful the blowing into the air of sweet gas or residue from sweet gas processed in gasoline plants and the use of sweet gas or residue from sweet gas in the manufacture of carbon black. It means the closing of two natural gasoline plants in the Panhandle, one of which is the largest plant in that area; the restricted operation of other gasoline plants; a curtailed operation of carbon black plants for a time until readjustments are made regarding plant locations and sources of gas; and a different set-up for natural gas pipe line companies in that part of their requirements will have to be supplied through purchases from other producers. In time this condition is expected to necessitate the construction of natural gas pipe line gathering systems costing several hundred thousands of dollars.

Of inestimable importance to the three industries concerned is the elimination of the vast waste of natural gas which has characterized operations in the Texas Panhandle; the removal of much of the uncertainty which has hindered operations and permanent planning; and the placing of operations in this vast area on a basis where stabilization may be procured through the formulation of equitable rules and regulations on the part of the Railroad Commission and proper enforcement of provisions of the law.

At the present time it is estimated approximately 1,300,000,000 cubic feet of natural gas is being blown into the air in the Texas Panhandle every day. The Federal Government estimates the waste at 1,600,000,000 feet and the state authorities of Texas at about 1,100,000,000 feet. Of this quantity about four-fifths is sweet gas and the remainder sour gas, that is natural gas with a sulphur content. Strict enforcement of the new law will prevent any of this gas from being popped into the air as is the practice now and, on Thursday of this week, the popping of sweet gas into the air becomes illegal. According to a careful survey made throughout the field, the law will be obeyed and the practice of popping sweet gas into the air will stop.

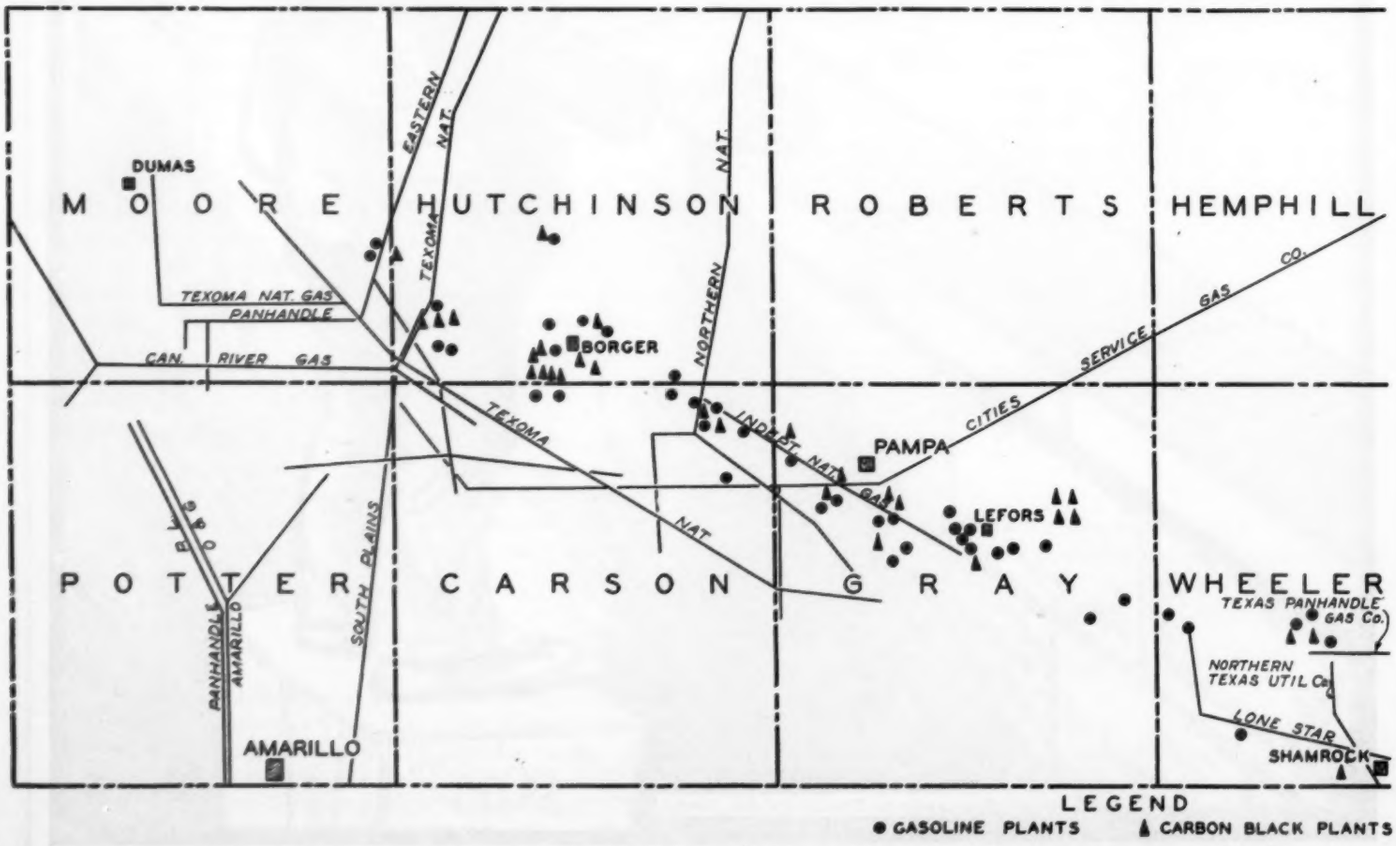
The new law provides that sweet natural gas can be used only for light or fuel; efficient chemical manufacturing other than the manufacture of carbon black; the extraction of natural gasoline therefrom when the residue is returned to the horizon from which it is produced or sold for light or fuel; or for bona fide repressuring work. Except in the case of casinghead gas, which first must be processed to extract its natural gasoline content, no sweet gas or residue therefrom can be blown into the air on and after August 1. And none can be used in the manufacture of carbon black.

Until October 1 sour gas may be blown into the air and the residue from sour gas processed through a natural gasoline plant may be blown into the air. On and after October 1 sour gas must be processed to obtain its natural gasoline content providing the residue is sold to a carbon black plant for the manufacture of carbon black or otherwise utilized for light or fuel or repressuring. Neither the sour gas nor its residue can be popped into the air after October 1.

The new law directly affects the operation of 41 natural gasoline plants, 29 carbon black manufacturing units, 23 natural gas pipe lines, 2,450 oil wells and 1,100 natural gas wells, in the Texas Panhandle alone. While the law is applicable throughout the State of Texas this article will be confined to the Texas Panhandle where the most direct effect will be felt. The Texas Panhandle Field, oil and gas, is 125 miles long and from 10 to 35 miles wide. It is the largest producing area, in acreage, in the world. It contains 1,504,386 productive acres of which 1,066,662 acres are productive of sweet gas and 437,724 acres of sour gas.

Of especial importance to owners of properties capable of producing natural gas is the fact that orders and regulations of the Texas Railroad Commission relating to proration of natural gas production in the whole field to market demand will necessitate the purchase of natural gas by pipe line companies, thereby providing a market for the sale of natural gas production which heretofore has not existed for all property owners.

Most of the pipe line companies, especially the larger units, have sufficient acreage and reserves in the field to provide all their needs without purchases from other owners. It has not been neces-



Location of gasoline plants, carbon black manufacturing units and large natural gas pipe lines in the Texas Panhandle

sary for them to buy gas but under rules and regulations issued by the railroad commission prorating production of all wells to market demand, a number of the pipe line companies will not be able to produce from their own wells a sufficient quantity of gas to supply their requirements and they will have to purchase the difference from other producers.

A remarkable feature of the situation is the fact all elements, no matter how affected by operation of the new law, believe the law is a good thing and are anxious and willing to co-operate in its enforcement and the making of its provisions effective. There is quite a widespread feeling throughout the area that one or two of the larger natural gas pipe line companies might attack the law and try to have its provisions nullified. It may be said on good authority, however, there is no disposition at this time on the part of these large pipe line companies to attack the law. They believe the law is a good thing for the industry for a "long time pull" and are willing to co-operate in the enforcement of the law under proper and equitable rulings and regulations of the Railroad Commission.

Settlement of the problem of waste and the constant agitation which has stirred all operations in the Panhandle Field and kept everyone in a turmoil since shortly after the field was discovered in 1918 is of such importance every element affected is willing to make sacrifices at this time to achieve stability and to remove all uncertainty regarding future operations and plans. But much depends on rules and regulations to be issued by the Railroad Commission. Regulations which may not be satisfactory to certain interests may be attacked.

For example, the legal representative of one large pipe line company personally objects to the order of the Railroad Commission prorating natural gas production on the basis of 50 per cent on the potential and 50 per cent on an acreage unit. This order provides that in the East Panhandle Field a well will be permitted to produce half its allowable based on its potential and the other half based on the number of acres containing the well, with 160 acres as a unit per well while in the West Panhandle Field the acreage unit is 640 acres per well.

This man claims such an order gives advantage to the owner of a small tract offsetting producing wells on large tracts. He says he does not mind for his company to purchase the other fellow's gas so much but he certainly objects to his company buying its own gas from the other fellow, his contention being the small tract would obtain some gas from the larger tract it offsets with the result the owner of the large tract might be buying his own gas which would migrate and be produced from the well on the smaller tract.

This man also claims the proration order of the commission really makes effective the old principle of common purchase contained in a Texas law which was nullified by the Federal Court.

On the other hand it is pointed out the new law stabilizes conditions in the field and assures pipe line companies with an investment well over $200,000,000 in lines and stations alone of adequate reserves for present and future markets for many years to come. It is estimated that, under the new law and the elimination of all waste such as blowing gas into the air, the Panhandle Field will be productive for 100 years at the rate of withdrawal based on present markets and requirements for the gas. It is estimated the recoverable natural gas reserve in the field now totals 29,000,000,000,000 feet. There has been a remarkably small drop in rock pressure in the field despite the fact that since 1926 the output of the field, including gas blown into the air, has averaged about 1,500,000,000 feet a day. The original average pressure of the field was 430 pounds. It now is 362.95 pounds.

On Thursday of this week the Cargray Corp.'s natural gasoline plant, which has been producing about 100,000 gallons of natural gasoline a day, will close down and remain closed as long as the law is effective. The same holds true of the American Natural Gasoline Co.'s plant which has been producing 60,000 gallons of natural gasoline a day. Neither of these plants has a market for the residue of the sweet gas on which the plants have been operating and, without such a market for use as light or fuel or other purposes permitted under the new law, the plants must close. The residue cannot be blown into the air or used for carbon black manufacture.

Other natural gasoline companies to be affected August 1 by reason of their use of sweet gas and inability to find so far a legal market for all of the residue, together with the quantity of natural gas production which each must shut in daily to conform to the law is estimated as follows: Phillips Petroleum Co., 50,000,000 feet; Coltexo, 30,000,000; Shamrock, 30,000,000; Henderson, 100,000,000; Smith Brothers, 50,000,000. Other companies to be affected October 1 when the sour gas provisions of the law become effective and the quantity of gas estimated to be shut in daily then follow: Phillips, 100,000,000 feet; Shamrock, 70,000,000; Skelly, 25,000,000; and Pacific American, 25,000,000.

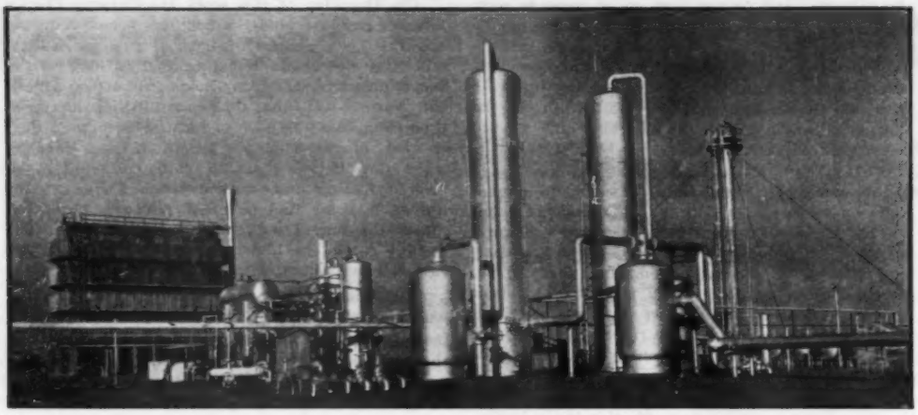
Plans under way for utilization of the residue from sour gas in the manufacture of carbon black may change this picture somewhat for some of the companies named. For instance the United Carbon Co. is constructing a carbon black plant with a capacity of 50,000,000 feet a day for utilization of residue gas from the Henderson plant near Sanford. Officials of the Shamrock company are negotiating for the construction of a carbon black manufacturing plant and, it is felt, a plant will be built near Sunray in Moore County to take

Texas Panhandle Natural Gasoline Plant Summary—Daily Average

(All figures in thousand cubic feet)

Company, plant and county—	Capacity	Take	Kind of gas	Extraction loss	Plant and lease use	Carbon black	Industrial and domestic	To air
Airolene Gaso., Magic, Wheeler	22,000	9,850	1-4	345	621	5,893	0	2,991
Amer. Nat., Shamrock, Wheeler	180,000	172,346	1	13,788	10,340	0	0	148,218
Buckeye Nat., Shamrock, Wheeler	35,000	21,387	1-4	1,134	3,513	13,629	0	3,111
Cargray Corp., McConnell, Carson	250,000	237,973	1	8,567	9,519	0	0	219,887
Coltexo Corp., No. 1, Gray	60,000	19,291	1-4	1,350	3,858			
Coltexo Corp., No. 3, Gray	70,000	33,547	1-4	2,348	6,709	47,425	222	21,697
Coltexo Corp., No. 4, Gray	50,000	40,489	1-4	1,620	8,098			
Crawford Gaso., Skellytown, Carson	10,000	5,453	3	654	3,350	0	0	1,449
Empire Gas & Fuel, Sullivan, Gray	40,000	15,394	3	609	1,478	3,393	0	9,914
F. C. Henderson, Sanford, Hutchinson	150,000	122,394	1-2	367	8,000	15,532	4	98,491
Magnolia Pet., Kingsmill, Gray	30,000	17,869	3	545	614	0	0	16,710
Magnolia Pet., Lefors, Gray	30,000	6,931	3	662	1,134	3,603	0	1,532
Magnolia Pet., Magic City, Wheeler	10,000	5,440	1-3	191	241	4,137	0	871
Magnolia Pet., Skellytown, Carson	25,000	7,469	3	272	718	5,989	0	490
Danciger Oil & Gas, Lefors, Gray	20,000	6,321	3	500	2,375	235	0	3,151
Pacific American, No. 1, Hutchinson	70,000	54,966	1-2-3	1,649	3,573	26,844	1,099	21,801
Phillips Petroleum, Pantex, Hutchinson	30,000	7,438	3	1,984	1,246			3,624
Phillips Petroleum, Panhandle-Carson, Carson	70,000	54,689	1-2-3	3,897	2,987	160,900		8,188
Phillips Petroleum, Johnson, Hutchinson	65,000	59,739	2	3,718	4,382			1,696
Phillips Petroleum, Rock-Creek, Hutchinson	165,000	139,025	1-2-3	7,934	3,241			47,634
Phillips Petroleum, Sanford, Hutchinson	90,000	94,222	1-2	7,114	9,146	14,100	0	63,862
Phillips Petroleum, Canadian, Hutchinson	24,000	15,281	2-3	1,024	2,410	10,300	0	1,547
Phillips Petroleum, Texroy, Hutchinson	90,000	59,688	2-3	3,791	6,963	21,600	0	27,334
Phillips Petroleum, Bowers, Gray	40,000	22,349	1-3	2,877	7,249			0
Phillips Petroleum, Gray, Gray	66,000	57,190	1-3	4,694	6,896			15,506
Phillips Petroleum, Pampa, Gray	40,000	30,543	1-3	4,502	6,783	39,000	21,300	4,349
Phillips Petroleum, Lefors, Gray	20,000	53,766	1-3	2,878	10,693			37,326
Phillips Petroleum, Bellco, Wheeler	10,000	15,309	1-3	2,069	3,080			9,955
Phillips Petroleum, North, Gray	44,000	.....	Shut down					
Portland Gaso., Pampa, Gray	30,000	32,521	3	735	5,115	21,851	0	4,820
Shamrock Oil & Gas, Clayton, Gray	30,000	9,392	1-3	251	2,622	0	4,052	2,467
Shamrock Oil & Gas, McKee, Gray	120,000	75,546	3-2	2,229	2,266	0	0	71,051
Shell Petroleum., W. Bryan No. 2, Carson	15,000	7,206	1-3	353	429	4,932	0	1,492
Shell Petroleum, Bryan No. 17, Carson	22,500	19,397	1-3	737	1,274	14,183	0	3,203
Shell Petroleum, Bryan No. 15, Gray	14,000	12,443	1-3	561	1,468	10,414	0	0
Skelly, Armstrong, Moore	30,000	28,487	2	969	2,157	0	0	25,361
Skelly, Panhandle, Hutchinson	25,000	14,631	2-3	657	3,373	9,547	0	1,054
Skelly, Kingsmill-Schafer, Carson and Gray	90,000	70,594	2-3	3,459	6,541	57,318	0	3,276
Smith Brothers, Sitter, Wheeler	130,000	102,221	1-3	3,067	3,067	0	907	95,180
Sunray Oil, Jones, Moore	60,000	56,110	3	1,683	1,683	0	0	52,744
Wilcox Oil & Gas, No. 5, Gray	12,000	5,660	3	440	2,022	3,198	0	0
Total	2,448,500	1,820,527		96,284	161,195	494,023	37,045	1,031,982

(1) Sweet. (2) Sour. (3) Casinghead. (4) Casinghead and gas well gas.



A natural gasoline plant in the Texas Panhandle

residue from the plant which, otherwise, would have to shut down.

Casinghead gas may be utilized for the manufacture of carbon black, after its natural gasoline content has been removed, and it is estimated, under present rules and regulations of the Railroad Commission, about 370,000,000 feet of this gas is available daily. This quantity may be reduced when the Railroad Commission issues final orders regarding oil-gas ratios for production of oil in oil wells. This casinghead is an important factor in the operation of some natural gasoline plants and is especially desirable because of its high natural gasoline content and because residue from gasoline plants processing this gas can be used for carbon black manufacture.

The average recovery of natural gasoline from natural gas in the field is estimated at four-tenths gallon per 1,000 feet. Naturally, recovery varies in different plants, depending on the gas used and the efficiency of the process employed. Natural gasoline production in the field in May averaged 873,500 gallons daily. Based on figures on the quantity of gas processed during June, as shown in the accompanying table, with a recovery of four-tenths gallon per 1,000 feet, production during June averaged slightly more than 720,000 gallons daily.

The estimate of 260,000 gallons daily reduction in production beginning August 1 is regarded by many observers as too conservative. The official of one large company operating a plant and in close touch with conditions in the field stated that with a rigid oil-gas ratio order by the Railroad Commission, and strict enforcement of provisions of the gas conservation law, natural gasoline production in the Panhandle would drop to 300,000 bbls. monthly by the end of this year. This compares with a known production of 645,000 bbls. in May.

Officials of the carbon black manufacturing industry believe enforcement of the new law and proper rules and regulations of the Railroad Commission will put an element of stability into the carbon black situation which the industry has never experienced heretofore. Features of the law prohibiting the use of sweet gas or residue from gasoline plants processing sweet gas and, after October 1, of sour gas without its being processed for its natural gasoline content, in the manufacture of carbon black, are especially beneficial to the carbon black industry. Without such provisions, carbon black manufacturing plants probably would spring up all over the field with the result the output of this product would be increased so much there would not be an adequate market for the production and the bottom would drop out of the price structure.

For instance, it is estimated that Cargray Corp could afford to pay someone one-fourth cent per 1,000 feet to take the residue gas from its gasoline plant, which is processing 240,000,000 feet daily, if it were legal to utilize this sweet gas residue for the manufacture of carbon black. The company still could make a profit on its natural gasoline manufacture, according to these estimates. Under such circumstances, residue gas for carbon black manufacture would not only cost the carbon black manufacturer nothing but he would get a bonus for accepting it and taking it away from the gasoline plant. It is estimated other gasoline plants in the field, without an adequate market or outlet for their residue under the new law, could afford to pay one-eighth cent per 1,000 feet or just give away the residue if such residue could be used for carbon black manufacture, just to be able to operate their gasoline plants.

Such a situation, it is said, would wreck the carbon black manufacturing industry in that it would invite and encourage the construction of carbon black manufacturing plants throughout the whole field. Carbon black manufacturers are anxious to co-operate in making the new law effective and believe the best interests of their industry will be served by manufacturers paying a fair price for the gas utilized, in fact a higher price than was the average for a long time.

It is probable important readjustments will be necessary in the carbon black manufacturing industry in the Panhandle because of the new law. It is not possible to determine exactly now what changes must be made as rules and regulations of the Railroad Commission on oil-gas ratios will have a most important bearing on many plants using casinghead gas or the residue from such gas processed in gasoline plants. It is probable three of the existing carbon black manufacturing plants will have to close, they being located in sweet gas areas where residue from gasoline plants cannot be used for the manufacture of carbon black.

The Phillips Petroleum Co. is now constructing a 24-inch pipe line from Moore County to a carbon black plant near Sanford in order to supply the carbon black plant with sour gas permitted in carbon manufacture, the plant heretofore being supplied with residue from sweet gas processed through the company's gasoline plant at Sanford.

The new law may force the re-location of carbon black plants and may result in many of the plants being located in Moore and Hutchinson Counties, the sour gas area. It may mean also a readjustment of existing pipe lines to carbon black plants, but, as stated above, determination of these matters must await final action by the Railroad Commission on rules and regulations, especially the matter of oil-gas ratio.

One or two of the carbon black manufacturing companies has leased considerable acreage in the Hugoton gas field, Stevens County, Kansas, and another company has leased 2,000 acres in the Oklahoma panhandle and is drilling a well there in search of gas. At present Kansas laws prohibit the use of natural gas in the manufacture of carbon black but those laws were enacted before natural gas was discovered in large quantities, such as in the Hugoton Field. It is thought possible, should a greater outlet or market be desired for natural gas production at Hugoton, present laws relating to carbon black manufacture in Kansas might be modified.

There are 4,530 miles of trunk natural gas pipe lines starting in the Texas Panhandle, this mileage not including gathering lines or laterals, or local lines distributing in towns in the Panhandle. These pipe lines have a capacity of 974,000,000 feet daily but have been carrying a little less than half this quantity from the field. The chief effect of the regulations under the new law is that which will necessitate purchases of gas by many of these pipe line companies from other producers or from properties owned by other persons. These pipe lines, with mileage (trunk) and capacity, follow:

Company—	Mileage	Capacity
Amarillo Oil Co.	45	30,000,000
Canadian River Gas Co.	340	125,000,000
Cities Service Gas Pipe Line Co.	460	125,000,000
Huber Petroleum Co.	60	7,000,000
Lone Star Gas Co.	260	50,000,000
Texoma Natural Gas Co.	925	200,000,000
Northern Gas & Pipe Line	850	150,000,000
Northern Texas Utilities	170	42,000,000
Panhandle Eastern	1,100	150,000,000
Panhandle Power & Light	....	10,000,000
Public Service Corp.	....	7,000,000
South Plains (West Texas)	260	35,000,000
Shamrock Gas Co.	....	8,000,000
Texas Panhandle (Consolidated)	180	35,000,000

Two oil producing companies with rather extensive holdings in Moore and Hutchinson Counties are reported to be considering the advisability of extending their operations. Should they do so it is entirely probable gasoline plants would be constructed to process the casinghead gas and that a carbon black manufacturing unit would be built to utilize the residue.

Carbon Black Manufacturing Plants

Company, name of plant and county—	Capacity	Source of gas—
Cabot Carbon Co., Kingsmill, Gray	30,000,000	Skelly, Shell and Empire
Cabot Co., Shafer, Carson	50,000,000	Skelly, Shell and Empire
Texas Elf Carbon Co., Bowers, Gray	50,000,000	Phillips and Shell
Coltexo Corp., Lefors, Gray	40,000,000	Coltexo Nos. 1, 3, 4
Crescent Carbon Co., Borger, Hutchinson	13,000,000	Plants Phillips
Better Black, Inc., Lefors, Gray	500,000	Danciger
United Carbon Co., McIlroy, Hutchinson	40,000,000	Phillips, Texroy plant
United Carbon Co., Rock Creek, Hutchinson	60,000,000	Phillips
United Carbon Co., Sandford No. 1, Hutchinson	16,000,000	Phillips, Sanford plant
United Carbon Co., Stinnett, Hutchinson	15,000,000	Phillips, Canadian plant
General Atlas Chemical Co., Gray County, Gray	4,000,000	Empire, Pampa plant
J. M. Huber Co., Borger, Hutchinson	35,000,000	Pacific American
J. M. Huber Co., Skellytown, Carson	8,000,000	Magnolia
United Carbon Co., Alexander, Hutchinson	30,000,000	Phillips
United Carbon Co., Norrick, Hutchinson	15,000,000	Skelly, Panhandle plant
Magnolia Petroleum Co., Pampa, Gray	5,000,000	Magnolia, Lefors plant
Magnolia Petroleum Co., Magic City, Wheeler	5,000,000	Magnolia
Western Carbon Co., Borger, Hutchinson	40,000,000	Phillips
Panhandle Carbon Co., Rock Creek, Hutchinson	12,500,000	Phillips
Peerless Carbon Co., Coltexo, Gray	1,550,000	Coltexo
Western Carbon Co., West Car, Hutchinson	60,000,000	Phillips
Western Carbon Co., Kingsmill, Gray	20,000,000	Portland
Western Carbon Co., Lefors, Gray	15,000,000	Coltexo Nos. 1, 3, 4
Western Carbon Co., Lela, Wheeler	16,500,000	Buckeye
Western Carbon Co., Magic City, Wheeler	6,500,000	Afrolene
Western Carbon Co., Pampa, Gray	7,000,000	Wilcox No. 5
Combined Carbon Co., Sanford, Hutchinson	30,000,000	Henderson
United Carbon Co., Sanford No. 2, Hutchinson (bldg.)	50,000,000	Phillips
Cabot Carbon Co., Armstrong, Hutch.Moore S.D.	8,000,000	Skelly
	602,550,000	

Texas Legislative Committee Probing Record of Railroad Commission

THE TEXAS legislative committee investigating enforcement went into qualifications of employes of the Texas Railroad Commission at the first public session at Austin Tuesday which has conducted secret inquiries in the East Texas Field. Ernest O. Thompson, commission chairman, was first witness, interrogated by Representative Sidney Latham of Longview.

Mr. Latham sought to show many important positions with the commission were occupied by persons without special training. Mr. Thompson asserted the chief qualifications for most of the positions were "common sense and honesty."

Mr. Latham questioned Colonel Thompson on the commission's enforcement procedure, particularly on methods of calculating refinery recoveries on which tenders for movement of refined products were issued.

"Isn't it a fact that the man who calculates these yields for the commission is a former theater man and dancing instructor who doesn't know anything about refining?" Latham asked.

"Not from my knowledge," Thompson replied.

"It's in the committee records," Latham said.

"I'm glad to know it. We'll investigate and find out about it."

"As a matter of fact doesn't the commission have a man checking water encroachment that never has been in the oil business and whose only training was in the cotton business?"

"Who do you mean?" Thompson asked.

"Earl Ford," replied Latham.

"Earl Ford is an engineering graduate of A. & M.," Thompson said. "I know him well. He was one of my lieutenants in France. He is a qualified engineer."

"I wonder why he doesn't tell the committee that," Latham commented.

Mr. Latham then read the personnel record of the East Texas staff. It included a lease broker, drug clerk, auto salesman, baseball players, three school teachers and persons with miscellaneous business and professional experience.

Mr. Thompson said latest reports of the commission indicated illegal production in East Texas had dropped to approximately 7,000 bbls. as estimated from refinery runs. He believed the commission, with the aid of new laws, had the situation under control and outlined the State's policies designed to furnish a more complete check on all the operations.

At the start of the hearing Colonel Thompson read into the record a statement asserting current unrest in the oil industry had developed from persistent rumors of a price cut originating in New York. He charged certain oil interests were endeavoring to break the price structure so they could fill storage with cheap crude and acquire valuable oil properties from independents in distress because of low prices.

Mr. Thompson said it was "quite possible that, in the magnitude of the task of handling the giant East Texas Field, the commission has made many mistakes." He said he was sure the committee had found conditions that could be improved and promised hearty co-operation in correcting faults.

"You were appointed to investigate charges based on rumors and insinuations reflecting on Texas officials engaged in administering the Texas oil proration laws, to the end that the fair name of Texas might be protected. Knowing your high regard for the fair name of Texas and its citizens and officials, I am sure you would not entertain or give dignity to any charges not supported by reputable witnesses under oath. I am sure you are not unmindful of the fact that those who would wrest control of the oil business from the State of Texas might, by inspired propaganda, seek to destroy the confidence of the people in their officials.

"The Railroad Commission has many employes. So far as I know and believe they are honest and trustworthy. If I am mistaken and you have found any evidence to establish that any employe of the commission is dishonest, I hope you will furnish us with such evidence that we may discharge him.

"As chairman of the Railroad Commission, I am most anxious to reserve control of Texas oil by the State of Texas. I would not, in the absence of credible testimony of the highest kind, do or say anything which would discredit state control of the oil business or destroy the people's confidence in the ability of the State, through its officials, to control it, and thereby give aid and comfort to those who would return our greatest industry to its predatory days."

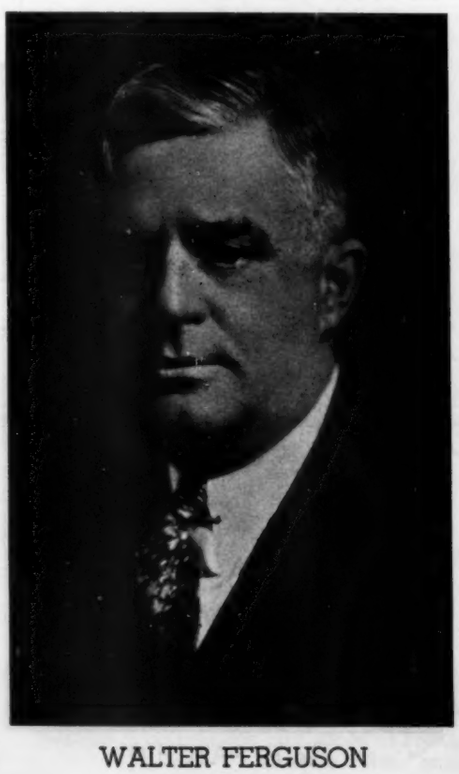
San Antonio Office

The Southwest Texas office of The Oil and Gas Journal is now located at 308 Milam Building, San Antonio, with George Weber, formerly of the Tulsa office, in charge. Mr. Weber has moved to San Antonio and will establish his residence there. From the San Antonio office he will cover that especially active area of Texas, including the San Antonio, Corpus Christi and Laredo districts.

Mr. Weber is a graduate of the University of Oklahoma with the degree of Bachelor of Science in Petroleum Engineering. He is a member of the Tau Beta Pi and Sigma Tau, honorary engineering fraternities.

Walter Ferguson Selected Executive of Mid-Continent Association

Walter Ferguson, vice president of the National Bank of Tulsa since 1927 and one of the best known men in the entire Southwest, has resigned his banking connection to become executive vice president of the Kansas-Oklahoma division of the Mid-Continent Oil and Gas Association, with headquarters in Tulsa. In his new position Mr. Ferguson will have charge of the expanded activities of the association and will be especially active in the direction of public relations, tax study and liaison work for the organization. A growing realization of the importance of such work and the necessity of providing helpful and constructive cooperation with state authorities and other organizations concerned with the welfare of the petroleum industry resulted in Mr. Ferguson being practically drafted for the position, he having been reluctant to sever his connection with the bank.



WALTER FERGUSON

Mr. Ferguson occupies a unique position in the activities of the Southwest. A former newspaperman and editor, he has made an intensive study of men and affairs and is an outstanding authority on the history and development of the Southwest and has enjoyed close friendship with most of the men prominent in the making of this history and the carrying out of the development. His home in Tulsa for years has been the mecca of oil men, public officials, judges of the various courts, members of the bar, state legislators and senators, members of Congress, bankers and active business executives. A part of his home is set aside for the display of relics of the pioneer days of Oklahoma, probably the most unusual display of weapons, photographs, etc., in existence. It was in his old home Edna Ferber wrote "Cimarron." Mrs. Ferguson is a nationally known writer.

Mr. Ferguson was born in Sedan, Kans., the son of the late Thomas B. Ferguson, once territorial governor of Oklahoma.

Oil Bill Sent to White House Is Latest Capital Report

WASHINGTON, D. C., July 30.—The Cole Committee is considering a bill, which has been submitted to the White House ratifying the interstate oil compact, making permanent the Connally act, allowing a flexible control over imports, and setting up a federal oil board.

The duties of the oil board will consist in administering the act as it is passed by Congress, as well as making legislative recommendations to Congress to cover matters which they deem advisable for the regulation or control of the oil industry.

The bill, as it is being considered, also allows voluntary agreements between members of the industry, with a consequent relaxing of the antitrust laws to allow such agreements. According to some members of Congress such a provision will have a hard time getting passed, some members already being on record as opposed to it, or any other relaxation of the antitrust laws.

Forms Pacific Petroleum Association As Voluntary Stabilization Plan

By L. P. STOCKMAN

THE COMMITTEE of Seven, appointed at the mass meeting of oil operators held in Los Angeles June 7, has unanimously approved the plan of proration proposed as part of a new voluntary program and has urged all California operators to sign it without delay. The board of directors of the Oil Producers Agency has also approved the program and has urged its members to sign the agreement. The new program of curtailment will go into effect as soon as 95 per cent of all operators approve and sign the agreement and a supplementary agreement between pipe line companies is approved in the Federal Court at San Francisco. The contract or proposed plan provides, among other things, that the state's allowable production shall be fixed at the consumptive demand with only such additions to or withdrawals from storage as shall be reasonable and seasonable.

The new plan is based on a contract between each crude oil producer and an association designated at the Pacific Petroleum Association. J. R. Pemberton, present umpire, is appointed umpire and is given authority to examine all books and accounts to ascertain compliance with contractual obligations. He is also given authority to demand reports and is obliged to furnish any producer, marketer or transporter, "such statements or evidence as may be necessary or appropriate to inform such person or persons both as to allowable production of any of the producing fields, pools, properties or wells in the state and as to the actual production of any such fields, pools, properties or wells."

SIGNATORIES agree not to "produce during any calendar month any crude petroleum from any property or well in excess of the allowable production of said property or well or permit any crude petroleum produced from any property or well of such signatory to be supplied to any person or persons transporting, storing, purchasing, selling, exchanging, refining or otherwise dealing in crude petroleum produced in excess of the allowable production of any property or well in the State of California. Each party hereto admits that in case of a breach of this agreement a judgment for damages will be of no avail as none of the parties hereto has an adequate remedy at law against any other party hereto and that adequate relief in case of a breach of any of the provisions of this agreement can be provided only by the remedies of injunction or specific performance granted by a court of equity."

The Pacific Petroleum Association will be composed of refiners or pipe line companies which buy or transport crude oil. The association is open to any and all buyers. The new plan is divided into two sections, one applying to producers and the other to buyers or transporters. The agreement applying to producers is being given to operators for approval and signature. Refiners and buyers are still at variance due to some extent because no provision is made whereby small refiners are assured of an ample supply of crude oil.

Due to the difference of opinion regarding operation of the Pacific Petroleum Association and the probability some changes must be made in the agreement as proposed it is definitely stipulated that "The Association hereby agrees to purchase any crude petroleum tendered to it at the average of the posted prices of its members for crude petroleum of the quality tendered prevailing at the time at the well in the field where such crude petroleum is produced, provided that the total production of crude petroleum for the State of California does not exceed the monthly allowable production of said state and the total production of the property or well from which the tendered petroleum is produced does not exceed the allowable production of said property or well, all as determined by the umpire as provided in an agreement between the producers of crude petroleum in the State of California. The association shall be obliged to make such purchases only upon being furnished with a satisfactory warranty of title to such petroleum as may be tendered and only if such petroleum is tendered upon a quarterly basis to be delivered as currently produced."

Owing to an injunction issued in the Federal Court in San Francisco several years ago when the Government instituted proceedings to stop the purchase of excess gasoline from Frank R. Long it will be necessary to secure a modification of this decree before the new program can become operative. The contract which producers are now studying provides "this agreement shall continue in full force and effect only so long as the aforesaid agreement between the members of the Pacific Petroleum Association shall continue in effect. Otherwise this agreement shall remain in effect for one year from its effective date and thereafter until terminated by the mutual consent of the signatories hereto provided, however, that any signatory hereto may withdraw from this agreement 60 days after giving notice of such intention to the umpire at any time 10 months after the effective date of this agreement.

"In the event of any controversy arising out of this agreement with respect to the computation and determination by the umpire of the allowable production of the state of California, or the allowable production of any producing field, pool, property, or well, or in the event of any other controversy arising out of this agreement, such controversy shall be referred to a board of arbitration, such board to consist of three members, one to be elected by a majority of the producers signatory hereto, and one to be selected by the Pacific Petroleum Association, these two to name a third member, provided, however, that any producer signatory to this agreement who is also a member of the Pacific Petroleum Association shall not be eligible to vote for the member of the said board to be elected by the producers.

"Upon the submission of any controversy the said board of arbitration shall decide such controversy in accordance with the procedure prescribed by Section 1286 of the Code of Civil Procedure of California. A decision of a two-thirds majority of the board of arbitration shall be final.

TO PROVIDE for administration of the agreement, it is provided that "as and when this agreement shall become effective as provided in Section X hereof, an executive committee of three shall be elected, selected and named in the same manner as hereinbefore provided for the appointment of the board of arbitration in Section 4 hereof. This committee shall hold office subject to the same conditions as hereinbefore provided for the said board of arbitration.

After naming J. R. Pemberton as umpire, the agreement provides that the umpire "shall compute and determine on the basis of statistical data as compiled by the U. S. Bureau of Mines or as available from other reliable sources, the total amount of crude petroleum required to be produced during each quarter of the calendar year in the State of California to supply the reasonable consumptive demand for such crude petroleum, and to so notify each and every producer in this state of such required production (hereinafter referred to as the allowable production of said state) not later than the fifteenth day of the month preceding the quarterly period for which the computations and determinations shall be made, provided however, that nothing in this agreement shall be construed to authorize or permit such computations or determinations to be made on any other basis than that which allows for the freest possible utilization of crude petroleum and its products for consumption and for only seasonal and other reasonable withdrawals from stocks or refinable crude petroleum in storage in this state, and, provided further, that if for any such quarterly period, the Pacific Petroleum Association shall notify the umpire and furnish evidence showing the reasonable consumptive demand to be either more or less than such demand as computed and determined by the umpire, then the umpire shall forthwith adjust the said determinations.

The umpire is also authorized to "compute and determine on a fair and equitable basis the proportion of the allowable production of the state as can be made available and allowed to each of the several producing fields, pools, properties or wells in the State of California during each calendar month.

P. H. Patchin Elected Director of Standard of California

The election, July 25, of Philip H. Patchin to the board of directors of the Standard Oil Co. of California follows an extensive career in journalism, public relations and diplomacy, and long service in the oil industry.

As a New York newspaperman and war correspondent, Mr. Patchin saw service in many parts of the world.

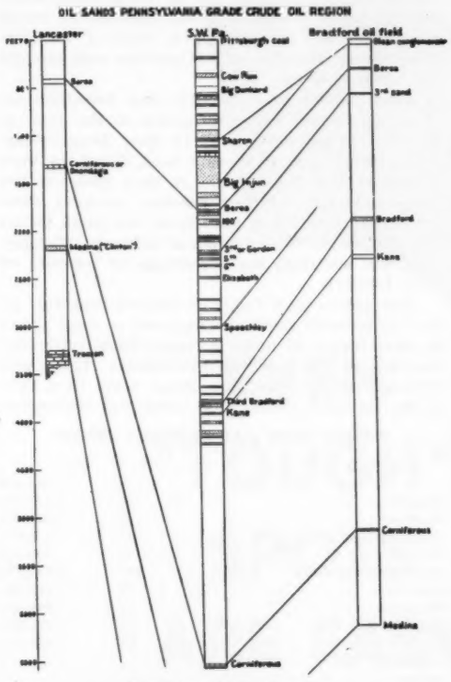
Since 1919 Mr. Patchin has filled the position of assistant to President K. R. Kingsbury of Standard Oil Co. of California. His services in this capacity led to his appointment as a director of the company

P. H. PATCHIN

Pennsylvania Middle Field Operators Are Turning to Secondary Recovery

By R. C. CONINE

THE THIRD GENERATION of Pennsylvania grade crude oil producers has shown that it can take it on the chin almost exhaustively, but it has become convinced that shock absorbers are better than patience. After five years of waiting for crude prices to cover current production costs, operators of the Middle District between Kane and Butler are moving in mass toward modern methods of secondary recovery. Although completely electrified leases have been in



Relationship of areas

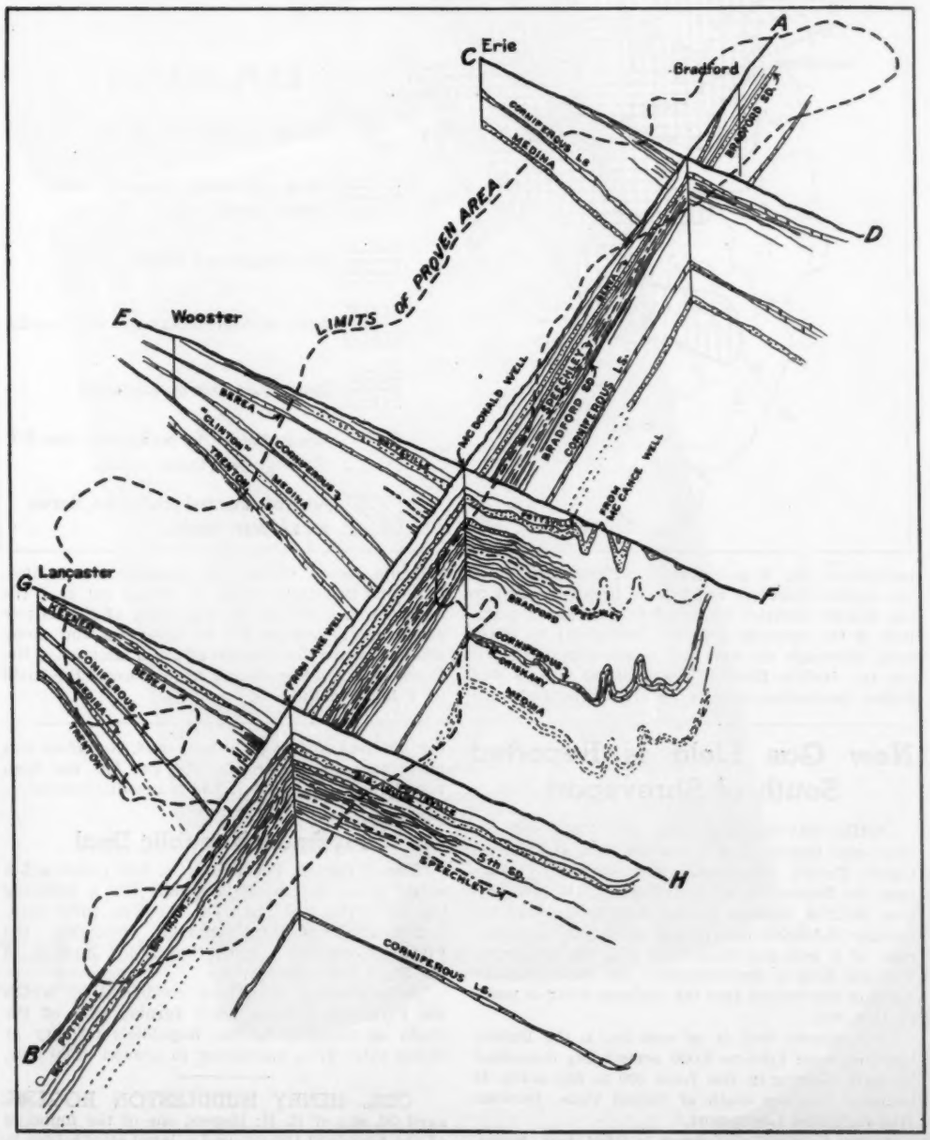
operation for some time in the Bradford (Rock City) and Kanesholm Fields, the first such installation in the Middle District is under way on the Lytle lease of the Fertig Oil Co., near Enterprise. On the Haily property, east of Titusville and 2 miles out on the Pleasantville road, a five-spot water flood has been started. In the Glade Pool, north of Warren, an unsuccessful water flood in the Glade sand was changed over to air-gas repressuring, and the result has been highly favorable. The reverse of the Glade sand case is presented in the present successful water flooding of the Clarendon sand at Old Clarendon and Saybrook, after air-gas repressuring proved of little value. The Olean Petroleum Co. lease at Kanesholm is another example of a successful water flood development after air-gas repressuring had failed.

Strip hunters are no novelty in Oklahoma and Texas, but in Venango County, where the cost of making a good township map showing leases and farm boundaries would run over $10,000, there is appearing a history specialist who seeks opportunities ignored or cast aside in the old days. These specialists pore over the Derrick's Handbook of Petroleum and spot the leases where 1,000-bbl. gushers caused operators to abandon 20-bbl. wells; where no wells were drilled into the Third sand; where properties, as in Pithole, were not drilled because of the sudden blowup of the field; where dewatering might prove profitable, and so on. It may be recalled that in 1928 an oil-minded deer hunter came upon a farm barren of oil well equipment although surrounded by operating leases. The hunter leased the farm and drilled a 100-bbl. well 100 feet inside the farm boundary.

If these accounts incline operators who do not know the region toward exploratory expeditions let them be forewarned. The prize lies somewhere among countless hills and creek beds, among dense pine growths and rock strewn flats. Then he may come within a few yards of success and condemn a whole section. The Queens Sand Pool near Tidioute produced 1,000-bbl. gushers around 1924, along a narrow strip. Just outside of this strip dusters were drilled into formations which had been sealed from the migrating oil by too rich an accumulation of calcium carbonate.

Then, there are those operators who believe that rich pay sands lie below the formations generally exploited. The entire region is fair game for these men. Locations of the principal deeper sand tests projected include the following: Penn Township in Butler County; Chippewa Township in Beaver County; Indiana Township in Allegheny County; west of Cannonsburg in Washington County. These are in Pennsylvania. In the Panhandle of West Virginia, about 5 miles southwest of Hookstown, Beaver County, Pennsylvania, and 7 miles southwest of Jenkins' No. 1 (earlier deep test) in Columbiana County, Ohio, two tests are planned for the deeper horizons.

Probably the most interesting development is in the Middle District, however. The water flood experiment on the Haily lease stirred up a storm of protest in the Central Pennsylvania Oil Producers Association. When water flooding in the Bradford Field was made legal by the legislature in 1921, the law stated that no sand above the Clarendon (Speechley) should be flooded. Possibly there were good reasons for this restriction. The usual experience with the Venango group of sands points to unfavorable consequences in flooding. However, many students of these formations con-

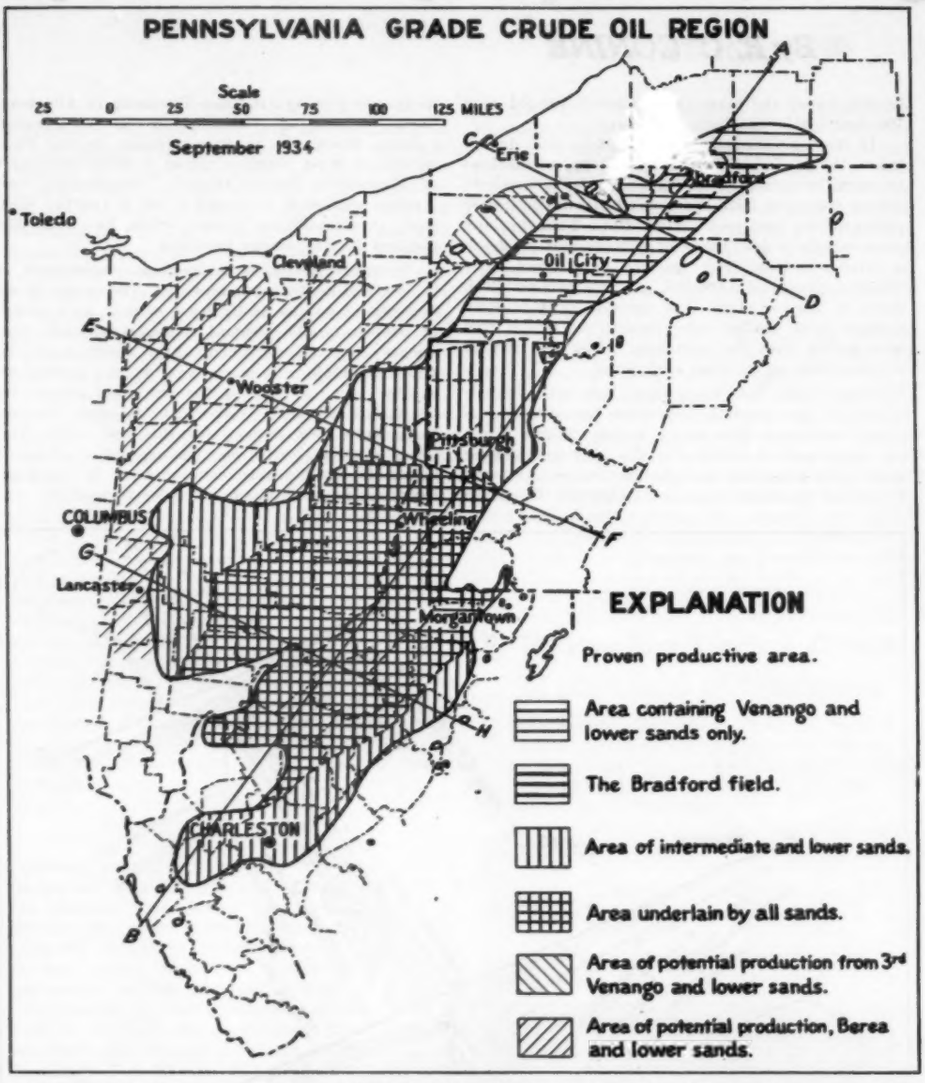


Relation of oil and gas pay sands of Pennsylvania Grade region shown in isometric perspective. The "basin" is indicated strikingly

tend it is possible to find sands above the Clarendon or Speechley which will respond favorably to water flooding. The Glade sand, for instance, is above this limiting level, and is showing fine results with water.

The Central Producers Association voted 23 to 4 against water flooding in the Oil City-Franklin-Titusville district. The deciding ruling, of course, lies with the courts and later, possibly, with the newcomers feel water flooding would prove more effective after methods are adapted to meet the so-called "broken sand" conditions in the fields below Bradford.

Charles B. McClintock, consulting geologist and petroleum engineer of Oil City and Titusville, finds in the geology of western Pennsylvania a treasure house of opportunities. The accompanying diagrams were prepared by Mr. McClintock for the Penn-



legislature, but it is generally agreed that all of the outside interests which have been attracted to the Middle District contemplate eventual application of the methods used so successfully in Bradford. Although air and gas repressuring are giving the Middle District nearly 2,000 bbls. a day higher production than a year ago, the Bradford

sylvania Grade Crude Oil Association and illustrate his statement when he points out that the apparent vagaries in the deposition of the 58 pay sands are accounted for by upstream and along shore selective distribution of grain sizes when the Pennsylvania oil producing region formed the basin of a huge inland sea.

New Gas Field Is Reported South of Shreveport

SHREVEPORT, La., July 30.—While still excited over prospects of a new oil field at Rodessa, Caddo Parish, Shreveport was stirred by news that the Hunter Co.'s No. 1 DeSoto, NW NW Section 29-12-14, DeSoto Parish, had been completed making 16,346,000 feet of gas daily, proving existence of a new gas field in Northwest Louisiana. The gas field is approximately the same distance south of Shreveport that the Rodessa Field is north of this city.

The Hunter well is on unit No. 1, the Hunter block of some 7,000 to 8,000 acres being assembled in units ranging in size from 400 to 640 acres. It is about 5 miles south of Grand Cane, between Mansfield and Logansport.

Total depth of the gasser is 2,841 feet. Seven-inch outside diameter casing is set at 2,810 feet. The test caught the sand at 2,818 feet and is producing from 23 feet of broken sand. No effort was made to core deeper and the gas has not been tested to determine if it has a gasoline content.

Plymouth-Republic Deal

The Plymouth Petroleum Co. has purchased a one-half interest in the Republic Oil & Refining Co. from the Big Lake Oil Co. The three companies are associated through ownership, the Plymouth owning a controlling stock interest in the Big Lake company.

Arrangements have been completed by which the Plymouth company will furnish part of the crude oil required by the Republic's refinery at Texas City, Tex., amounting to around 6,000 bbls.

COL. HENRY HUDDLESTON ROGERS, aged 56, son of H. H. Rogers, one of the founders of the Standard Oil Co. and a large stockholder in oil companies, died at Southampton Hospital, Long Island, New York, July 25.

Runs to East Texas Refineries Increase During Week

FORT WORTH, Tex., July 29.—Runs to refineries in the East Texas Field made another jump this week. There were the same number operating, however, 33, as last week, but runs jumped from 57,500 bbls. per day to nearly 62,200 bbls. per day.

The question has come up as to who is responsible for the tax on gasoline and other products confiscated by the State and sold at public auction. No provision was made in the confiscation bill (House Bill No. 581) to cover payment of tax on such products, and the Attorney General's Department was put on notice by the Comptroller's Department that the former would be held responsible for the tax. A conference between members of the two departments is to be held to discuss the problem.

In one sale of 103,000 bbls. of confiscated gasoline the Attorney General's Department stands to lose $16,300 plus the expenses of confiscation and sale of the gasoline. The tax on this gasoline would amount to $173,040, the 1-cent federal tax would amount to $43,260, making a total of $216,300, when the entire lot of oil and gasoline only brought the State $200,000.

Long talked of inspection and investigations of yields of the many refineries in the field is expected to get under way in East Texas today. Some refiners have already been found to have misrepresented the recovery of their plants in the field, claiming a higher gasoline recovery from crude than was found possible by the small plants and the present investigation or refinery efficiency tests will ascertain the percentage of recovery of each refinery.

The Austin Civil Court of Appeals held July 27 that an innocent purchaser acquired no legal rights to move illegal oil under a forged tender allegedly executed by the Railroad Commission. This court reversed the decision of a lower court in a case of the Railroad Commission versus Oil Refineries.

WEEKLY TANK CAR SHIPMENT REPORT

Week ending 12:01 a.m. July 21, 1935

	Cars	Gallons
Gasoline	659½	5,342,790
Fuel oil	249	2,321,069
Residuum	15	121,875
Distillate	74	600,320
Casinghead gasoline	201	1,709,789
Gas Oil	53	439,735
Kerosene	55½	440,104
Naphtha	21	170,294
Topped crude	60	549,411
Crude oil	...	.....
Butane	...	.....
Total	1,388	11,695,390

Shipped under Federal and State tenders:	No. cars
Interstate	554
Intrastate	152
Coastwise	434
	1,140
Shipped under State tenders only: Interstate movement	248
Total	1,388

California Court Prohibits the Waste of Natural Gas

LOS ANGELES, Calif., July 30.—Superior Judge Haas, recognizing that dissipation of natural gas in Playa Del Rey Field was injurious to the field and waste of a natural resource, acceded to the petition of state officials and granted an injunction enjoining operators from further blowing gas into the air either before or after processing by natural gasoline plants. The hearing began in the Superior Court at Los Angeles Monday morning and decision was rendered late Tuesday.

Yount Lee Deal Closed

Negotiations have been concluded for the purchase by Stanolind Oil & Gas Co., producing subsidiary of the Standard of Indiana, of all the oil properties and operating equipment belonging to Yount Lee Oil Co. of Beaumont, Tex., for a cash consideration of approximately $42,000,000. Exchange of cash and properties have taken place and Stanolind will start operating August 1.

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Bill for Regulating Buses and Trucks Is of Importance to the Oil Industry

By HUGH D. MALLON

ONE PIECE of legislation now before Congress, which will have a direct effect on the oil industry is the bill to regulate trucks and buses, which is being sponsored by the President and pushed through Congress on his list of "must" legislation.

Following the recent passage of the motor carrier regulation act by the Senate the House Committee on Interstate and Foreign Commerce has adopted the Senate bill, and with a few amendments has favorably reported the measure to the House, urging its speedy passage by that body.

The bill is endorsed by President Roosevelt, the Interstate Commerce Commission, Federal Transportation Coordinator Eastman, all state regulatory bodies, and numerous bus and truck organizations.

As reported by the House committee amendments have been made designed to clear up some indefinite points as passed by the Senate. The House draft specifically limits the application of the law to carriers engaged in interstate or foreign commerce, to remove possibility of conflict with state commissions or agencies engaged in intrastate regulation.

IT IS PROVIDED the Interstate Commerce Commission, designated to administer the act, shall not have power to set intrastate rates or in any manner regulate the rates for intrastate transportation by motor carrier, regardless of whether such action is sought for the purpose of removing discrimination against interstate commerce, or for any other purpose. The commission has the power to set intrastate rates for railroads, this point having been decided in the Shreveport rate cases by the United States Supreme Court.

Representative Sadowsky, who reported the bill for the Interstate and Foreign Commerce Committee, stated the bill contains substantially the same principles of regulation as provided in all of the 48 States that regulate common carriers and the 42 states regulating contract carriers. As the bill now stands it has the endorsement of all these state commissions.

Measures somewhat similar have been before Congress for several years, and have been favorably acted upon by the Senate, but the House has never voted on the subject.

Contract carriers are to be subject to the power of the Commission to establish reasonable requirements with respect to uniform systems of accounts, records and reports, preservation of records, qualifications and maximum hours of service of employes, and safety and operation of equipment. A permit system covering contract carriers is provided. Permits are to be granted upon qualifications of equipment, filing of minimum rate schedules (approval or disapproval of which is the limit of the Commission's jurisdiction over rates for contract carriers) and if it appears the applicant is able properly to perform the service.

For common carriers the Commission is empowered to fix the maximum, minimum or going rates to be charged by such carriers, but in the case of contract carriers can only approve or disapprove minimum rates filed by the contract carrier. The rate fixing shall be based on the cost of operation, which the committee feels is not unreasonable.

The only regulations which are applicable to private carriers provide that the Interstate Commerce Commission may set the maximum labor hours of driving and safety or equipment regulations may be enacted. This, the committee reports is necessary to improve the public safety on the highways, and in the public interest.

Provision is made for appointment of joint boards composed of a representative of a state commission and the Interstate Commerce Commission when controversies arise. The Commission may in its discretion, refer to a joint board any investigation and suspension proceeding or other matter not specifically mentioned, which may arise but the joint board shall be composed solely of one member from each state within which the motor carrier or brokerage operations involved are operating. An examiner from the Commission may be delegated to advise and assist the joint board, but only under regulations prescribed by the joint agency.

An investigation on the need for Federal regulation of the sizes and weight of motor vehicles and combinations of motor vehicles is also provided. The investigation would cover qualifications and maximum hours of service of employes of all motor carriers and private carriers of property by motor vehicle as well as sizes and weights.

Prompt action by the House in passing this measure is expected, attempts now being under way by House leaders to have the bill considered before the Ways and Means Committee gets the new tax bill before Congress. If this action is unsuccessful, it is expected the bill will be considered immediately following the tax bill, but in any event will be up for debate within the next three weeks.

The effect of this proposed law will probably be felt by the oil industry in increased costs of operation, the cost to be primarily laid on the marketing branch where most of the trucking operations are essential. Private carriers and contract carriers cover practically all motor vehicle uses in the industry and are not as rigorously regulated as are common carriers, but the incidental regulations applicable to these classifications will be felt.

Private carriers will be forced to accept maximum working hours for drivers and must abide by safety and equipment orders of the Commission, while contract carriers besides having to abide by these rules, must also file with the commission minimum rates for each contract and have such rate approved. Contract carriers must file with the commission whatever reports, questionnaires or other data the Commission might desire, including, if the commission requests it, each or any contract which the carrier might enter into in relation to any traffic affected by this act.

THE MINERAL leasing act introduced by Senator O'Mahoney passed the Senate this afternoon. Secretary Ickes has approved extension of mineral leasing permits until September 1 to allow the House time in which to consider the bill.

The bill directs the secretary to issue permits to applicants who have filed the application 90 days prior to the enactment of the proposed law. It is not the intention of Congress to discriminate between applicants for permits, and for this reason the Secretary is ordered to issue permits if all other legal conditions have been followed by the applicant.

Such permit shall give the exclusive right, for a period not exceeding two years, to prospect for oil or gas upon not to exceed 2,560 acres provided the permittee shall begin drilling operations within six months from the date of issuance of the permit, If such permit is issued upon any area after discovery of oil or gas deposits which have been discovered since the application was filed the royalty to be paid upon the preferential lease granted under such permit shall be 10 per cent, instead of only 5 per cent as under the old law.

All permits outstanding on the effective date of this act shall be extended to December 31, 1936, unless such permits are subject to cancellation for violation of the law or operating regulations. Further extensions are authorized for one year at the discretion of the Secretary of the Interior, but no extension beyond December 31, 1937, shall be granted.

Any permittee may, after the enactment of this act, exchange his permit for a lease to the area described in the permit, at a royalty of not less than 12½ per cent of the value of the production, without proof of discovery of oil or gas deposits. The lease would be subject to such bonus, to be paid out of the production and to be added to the royalty, as may be accepted, but in no case shall the amount so fixed be less than 12½ per cent, nor more than 25 per cent, except when the production is greater than 500 bbls. of oil per day per calendar month, in which case such higher royalty may be fixed as the Secretary may by regulation prescribe.

RENTAL OF not less than 25 cents per acre per annum, is also provided for, which rental shall not be waived, suspended, or reduced unless and until a valuable deposit of oil or gas shall have been discovered within the lands leased. Rental for any one year, however, shall be credited against the royalties as they accrue for that year.

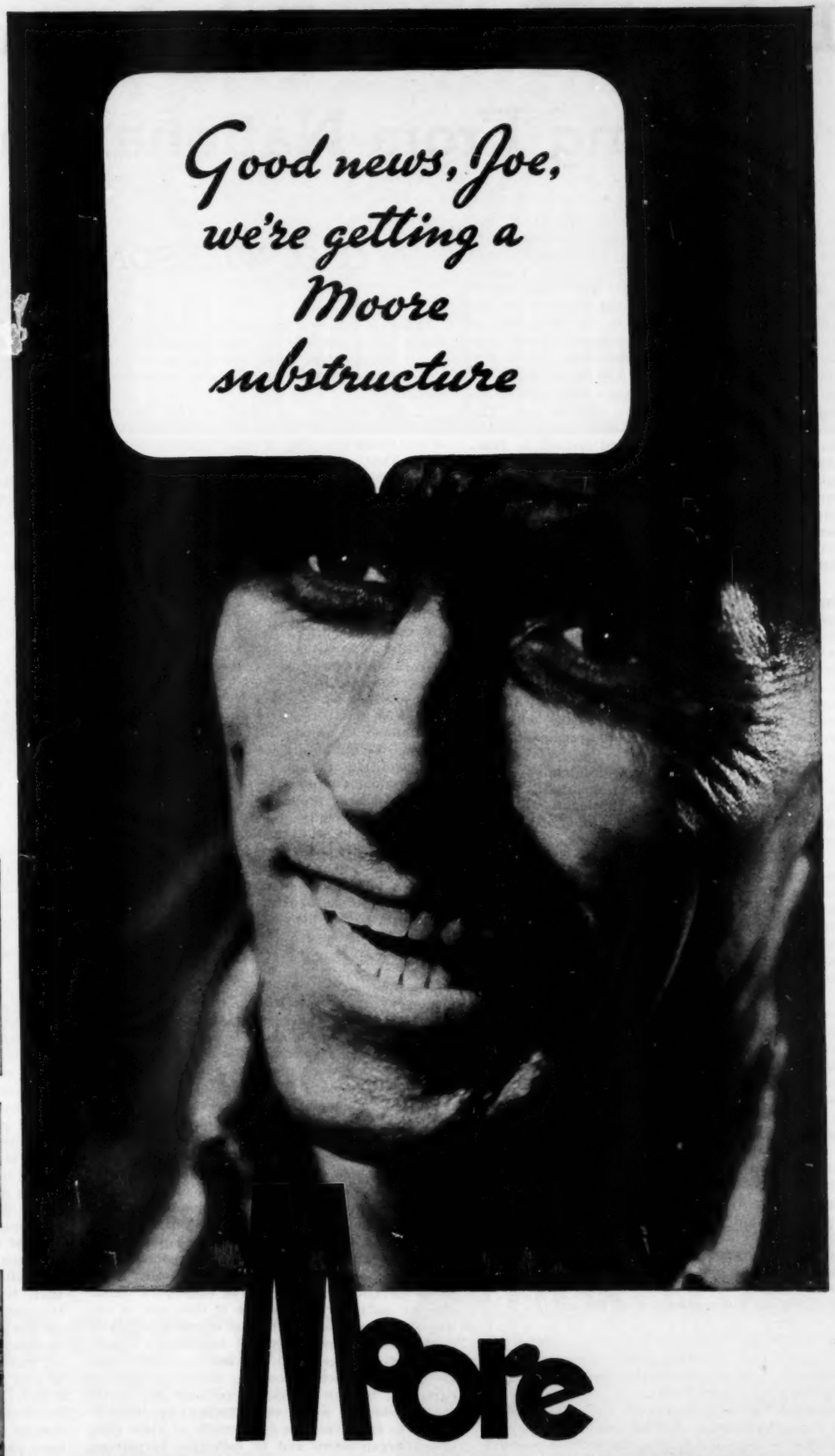
In the case of leases valuable only for the production of gas the Secretary of the Interior upon showing by the lessee that the lease cannot be successfully operated upon such rental or upon the royalty provided in the lease may waive, suspend, or reduce such rental or reduce the royalty.

All leases hereafter issued under this act shall be conditioned upon an agreement by the lessee to operate under such reasonable co-operative or unit plan for the development and operation of any such area, field, or pool as the Secretary may determine to be practicable and necessary or advisable. Such plans should adequately protect the correlative rights of all parties in interest.

In an unproven area leases shall be for a term of 5 years and as long thereafter as oil or gas may be produced in paying quantities, but in proven areas the lease shall be for a period of 10 years and so long as oil or gas is produced in paying quantities, provided that no lease shall be deemed to expire by reason of suspension of operations by the order of the Secretary.

The person first making application for the lease of any lands not within any proven area including those applicants for permits who have filed less than 90 days before the enactment of this act have exercised the option of taking a lease instead of the permit, shall be granted a preference right over others to a lease of such lands without competitive bidding at a royalty in the case of oil of not more than 12½ per cent when the production does not exceed 50 bbls. per day, and a royalty of not more than 25 per cent when the production exceeds 50 bbls., but not 500 bbls. daily. When the production exceeds 500 bbls. the royalty shall be prescribed by the Secretary.

Whenever the average daily production of the oil wells on an entire leasehold, or on any tract or portion thereof segregated for royalty purposes shall not exceed 10 bbls. per well per day, or where the cost of production of oil or gas is such as to render further production economically impracticable, the act provides that the Secretary of the Interior, for the purpose of encouraging the greatest ultimate recovery of oil and in the interest of conservation of natural resources, is authorized to reduce the royalty on future production,



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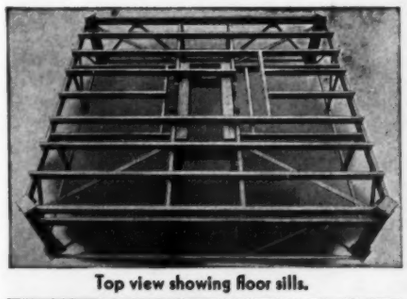
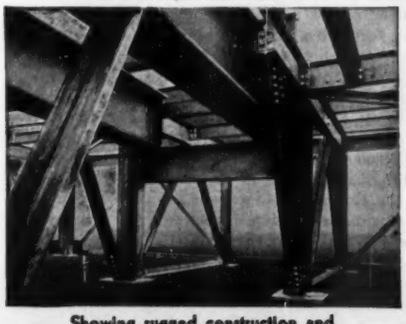


Top view showing floor sills.

View showing corner construction and removable panel in the side.



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Industry Soon to Face Initial Problems Arising From National Labor Law

By C. O. WILLSON

THE OIL INDUSTRY will shortly be faced with the initial problems connected with the enforcement of the National Labor Relations Act commonly known as the Wagner-Connery Labor Disputes Act. This most important federal law governing the relations of employer and employe, signed by the President on July 5, only awaits the appointment of the three members of the National Relations Board, and the machinery of application will be set in motion.

The government already has a large part of the organization needed to enforce the new law. The new board will step into the shoes of the present National Labor Relations Board created in June, 1934. All employes of the old board are to be taken over and the new organization is ready to carry on the routine work which often delays application of a new law. The board will have the benefit of the experience in settling labor disputes over a two-year period under the NRA and its temporary successor.

From the standpoint of labor the new law is supposed to take care of all the apparent weaknesses of previous acts and enable organized employes to accomplish long sought objectives without being hampered by legal restrictions or effective opposition from employers. Representatives of labor are now ready for aggressive action in many industries, including oil. Leaders have pointed to the latter as one industry with the greatest possibilities for expanding organized labor under the new act.

However, a majority of the legal minds within and outside the oil industry apparently believe the act will be held unconstitutional. Its legal status rests upon judicial interpretation of the commerce clause of the Constitution.

Aside from the question of constitutionality, legal opinion leans to the position that application in the oil industry will be restricted due to the nature of its operations. The Supreme Court decisions in the Schechter case; the Panama Refining Co. case and other decisions, are cited as indicating the great bulk of oil operations will be exempt from the act.

It is held crude production and the manufacturing operations of the oil industry are essentially intrastate and as regards labor, could not come under an act whose authority rests upon the control of interstate commerce. It is assumed the operation of interstate pipe lines and certain phases of marketing operations are an exception to the general rule of intrastate control claimed for the oil industry.

Particular reference is made by sponsors of the act to the operations of the large integrated units with crude oil production in one or more states, pipe line facilities connecting to refineries in other states and a distributing system which covers a large part of the United States. It will be contended the interstate character of these large scale operations considered as a unit rather than the intrastate phases of segregated operations, should be the basis for application of the act.

THE MAIN purpose is to promote collective bargaining between employes and employers. It is contended labor has been at a disadvantage due to lack of legal authority covering its rights and unfair acts of employers who did not wish to be placed on a parity with employes in labor disputes.

The rights of employes are set out in Section 7 which says: "Employes shall have the right to self-organization, to form, join or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in concerted activities, for the purpose of collective baragining or other mutual aid or protection."

This is followed by Section 8 which defines unfair labor practices of employers as follows:

"1. To interfere with, restrain, or coerce employes in the exercise of the rights guaranteed in Section 7.

"2. To dominate or interfere with the formation or administration of any labor organization or contribute financial or other support to it: Provided, That subject to rules and regulations made and published by the board pursuant to Section 6(a), an employer shall not be prohibited from permitting employes to confer with him during working hours without loss of time or pay.

"3. By discrimiatinon in regard to hire or tenure of employment or any term or condition of employment to encourage or discourage membership in any labor organization: Provided, That nothing in this act, or in the National Industrial Recovery Act (U. S. C., Supp. VII, title 15. secs. 701-712), as amended from time to time, or in any code or agreement approved or prescribed thereunder, or in any other statute of the United States, shall preclude an employer from making an agreement with a labor organization (not established, maintained, or assisted by any action defined in this act as an unfair labor practice) to require as a condition of employment membership therein, if such labor organization is the representative of the employes as provided in Section 9(a), in the appropriate collective bargaining unit covered by such agreement when made.

"4. To discharge or otherwise discriminate against an employe because he has filed charges or given testimony under this act.

"5. To refuse to bargain collectively with the representatives of his employes, subject to the provisions of Section 9(a)."

SECTION 8 seeks to prevent employers from interfering with organizations of employes and makes collective bargaining mandatory. Part 2 presumably is aimed at so-called "company unions." Within the oil industry there are several types of these company organizations which have been favored over outside unions by a majority of employes. Some were formed after the NRA became effective but others antedate that period by several years. In probably all cases the employers contribute in one way or another to support of these company organizations. In some cases the work of the personnel departments ties in directly with the employes' organizations and the companies contribute to hospital, athletic, educational and other funds which are a part of the general program of the employes' organizations.

Under the new act, contributions or other forms of co-operation on the part of employers constitute an unfair trade practice if they are in any way a part of the organization of employes which deals with employers in labor matters on a basis of collective bargaining. Another provision aimed at the continuance of company unions is found in part (b), Section 9, which provides the "Board shall decide in each case whether, in order to insure to employes, the full benefit of their right of self-organization and to collective bargaining, and otherwise to effectuate the policies of this act, the unit appropriate for the purpose of collective bargaining shall be the employer unit, craft unit, plant unit or subdivision thereof."

Under this provision the board might if it sees fit ignore an organization constituting a majority of the employes of a company as the unit for collective bargaining. By giving recognition to craft units, often controlled by outside unions the board in effect could nullify the wishes of a majority and place control in the hands of minority interests directed by labor leaders outside the company. The latter in the past have made known their opposition to general organizations within a company claiming the rights of employes can be protected only with unions which recognize trades and classes of workers.

IT IS GENERALLY conceded part 3 of Section 8 aims to facilitate closed shop arrangements between employes and employers.

Section 9 provides that persons chosen by a majority of the employes shall be the exclusive representatives of all the employes "for the purpose of collective bargaining in respect to rates of pay, wages, hours of employment, or other conditions of employment." It is provided individual employes or minority groups may present grievances to their employers. It is not clear that the employers or the majority group of the employes are obligated to give special consideration to these minority interests. The provisions of the act obviously are intended to prevent the wishes of majority groups among employes being nullified through minority oppositions.

Section 9 provides that whenever a dispute arises as to representation of employes the board is authorized to conduct an investigation. If it decides a special election is necessary, the election will be held in the manner that it deems necessary and its finding will be final.

The act outlines the procedure to be followed in case of complaints against employers alleging unfair trade practices. The board is obligated to serve complaints and set dates and conduct hearings. The board has wide latitude as to how the hearings shall be conducted. It has authority to issue subpoenas and obtain from employers practically any information it considers necessary to arrive at a decision.

A court procedure is provided in the event the employer refuses to carry out the rulings of the board. In effect the only penalties provided against employers so far as the board's findings are concerned, are based on the unfair labor practices for contempt of court after a court has granted the board's requests and issued court orders.

In regard to the court's part of Section 9 is important. It provides:

"Any person aggrieved by a final order of the Board granting or denying in whole or in part the relief sought may obtain a review of such order in any circuit court of appeals of the United States in the circuit wherein the unfair labor practice in question was alleged to have been engaged in or wherein such person resides or transacts business, or in the Court of Appeals of the District of Columbia, by filing in such court a written petition praying that the order of the Board be modified or set aside. A copy of such petition shall be forthwith served upon the Board, and thereupon the aggrieved party shall file in the court a transcript of the entire record in the proceeding, certified by the Board, including the pleading and testimony upon which the order complained of was entered and the findings and order of the Board. Upon such filing, the court shall proceed in the same manner as in the case of an application by the Board under subsection (e), and shall have the same exclusive jurisdiction to grant to the Board such temporary relief or restraining order as it deems just and proper, and in like manner to make and enter a decree enforcing, modifying, and enforcing as so modified, or setting aside in whole or in part the order of the Board; and the findings of the Board as to the facts, if supported by evidence, shall in like manner be conclusive."

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An Opportunity To Show Public Spirit

Enactment of the new gas conservation law by the State of Texas and the issuance of rules and regulations making effective this week provisions of that law mark a great forward step by the State and the petroleum industry towards conservation of natural resources. The only appreciable waste existent in the oil industry has been the blowing into the air of more than one billion feet of natural gas daily in the Texas Panhandle. With proper enforcement that waste will be eliminated entirely.

Stability of operations of three large industries in the Texas Panhandle—natural gasoline, carbon black manufacturing and natural gas pipe line—and the settlement of a highly controversial subject which has agitated that area for years is a goal well worth making sacrifices to achieve. Fortunately that is the attitude of nearly every individual and company affected by the new law.

All rules and regulations issued by the Railroad Commission in carrying out provisions of the law will not be satisfactory to all concerned. But that certainly is no excuse for any effort calculated to nullify the entire law or rules and regulations which would vitally affect enforcement of provisions of the statute. The results expected from the law are too important to be menaced by any action based on purely selfish motives.

Each of the three industries especially affected by the law has an exceptional opportunity to prove its public spiritedness. Ill-advised actions on the part of certain public utilities have given a portion of the public an entirely erroneous idea about the operations of such utilities. The new law in Texas affects many individuals and companies and the public and the government will watch with close interest the carrying into effect of the provisions of the law and the manner in which those affected co-operate to achieve the desired results.

Oil Industry's Interest in Bus and Truck Bill

The oil industry is interested in the bill before Congress to regulate bus and truck operations under the Interstate Commerce Commission for two reasons.

The House committee, in recommending the bill passed by the Senate with some minor amendments, speaks of "the need for motor carrier regulation to develop a co-ordinated system of transportation" which it says can be had "only by government regulation of all agencies of public transportation."

This has been exactly the railroad argument in seeking to curb the competition of buses and trucks. The railroads hoped that such regulation of highway traffic would reduce it very materially and to that extent restore business to the rails. If that is the outcome the oil industry can easily see that its market for motor fuel and motor oil used by trucks and buses is threatened. Trucks and buses can be driven off the roads by excessive regulation, or withdrawn through the development of monopoly under the shadow of regulation which baffles competition.

The oil industry is among the largest users of trucks, in field and marketing. The pending bill, besides imposing the same regulation of bus and truck rates imposed on railroads, authorizes the commission to establish vehicle standards of weight and size and to regulate hours of labor on private carriers also.

This hours of labor provision is put forward on the theory that it is in the interest of safety to passengers and property but actually makes them discretionary with the commission leaving the oil companies only to foot the bill.

It may be recalled, however, that in a case of the railroads a law requiring a larger crew than was actually needed, put through on a similar plea of being a measure for the safety of the public, encountered obstacles in the courts.

The thought also obtrudes that interstate passengers and property, even though "protected" by such a Federal regulation, would still be in peril on the same highways from unregulated intrastate traffic which the bill leaves carefully to the States.

Progress Reported in Pacific Coast Area

The progress made towards formation of the Pacific Petroleum Association justifies the confidence expressed in the ability of the California industry to reach an adjustment.

As was recognized under the Federal oil administration by the establishment of the Pacific Coast Petroleum Agency, California presents largely a local problem that can best be settled at home. The responsible companies are willing to go to extreme lengths to harmonize differences but if these prove obstinate there is but one remedy. Just now there is the plain choice between co-operation for the common welfare or the certainty that any outbreak of overproduction must be short lived and will be accompanied by a collapse in prices.

The men who take the long range view are in command of the situation. Those who are actuated by immediate gain are becoming conscious it is not to be had. The outcome should be a period of peace and prosperity in California.

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NEWS FROM FOREIGN LANDS

Germany

According to reports made to the Department of Commerce, crude oil production in Germany for first five months of this year totaled 1,279,824 bbls., a gain of 70 per cent when compared with the 757,148-bbl. total for the same period in 1934. Practically all of the oil is produced in the Province of Hannover, where the production in May amounted to 278,747 bbls.

Despite this large increase in production, Germany is still dependent on outside sources for a large part of the petroleum product supply consumed in that country. Imports of crude oil and refinery products imported the first five months of this year were as follows (data in barrels):

	1935	1934
Crude Oil	631,800	587,700
Gasoline	2,898,100	3,078,300
Kerosene	249,200	299,100
Gas oil	1,830,900	1,405,300
Lubricating oil	1,190,900	772,100
Misc. oils	1,484,000	1,602,900
Total	8,284,900	7,746,400

This gain of more than 1,000,000 bbls. the first five months in crude oil production and total imports does not take into consideration production of synthetic petroleum products, which exceed those of any other country. The country has a substantial production of motor fuel through hydrogenation of coal. The gain in gas oil imports shown in the above table is said to reflect the expansion in cracking facilities and the gain in demand for petroleum products suitable for Diesel fuels.

Brazil

With 128,500 automobiles in operation and having no petroleum resources which necessitates the importation of approximately 2,000,000 bbls. of gasoline annually, the Brazilian government has for years endeavored to promote the use of domestically produced alcohol as motor fuel, according to C. C. Concannon, chief of the commerce department's chemical division.

Although federal laws provide that domestic alcohol shall be mixed with imported gasoline, no less than 15 decrees having been promulgated during the past four years, only a relatively small amount of alcohol, estimated at about 25,000,000 liters per annum, is produced in the country at present for fuel purposes and consumption is confined chiefly to the large centers, he stated.

In addition to providing for the compulsory use of alcohol in fuel blends, decrees so far issued specify the percentage and grade to be utilized, when and how the alcohol is to be purchased, and the grant of tax rebates and special privileges to alcohol plants. The chief obstacle thus far appears to be the difficulty of obtaining alcohol in quantity of a grade satisfactory for blending purposes, it was stated.

Brazil with its important sugar industry has large quantitits of by-product molasses suitable for the manufacture of alcohol as well as many other vegetable products, including the mandioca, available for the purpose. The present alcohol output comes very largely from molasses. One plant, established by the Minas state government in 1932 uses mandioca exclusively as a raw material for the production of motor alcohol. This plant was recently enlarged and is said to be in a position now to distill approximately 120,000 liters per month, according to Mr. Concannon.

Notwithstanding the difficulties which have been encountered in introducing alcohol as a motor fuel in Brazil the government appears determined in its efforts to see its use general throughout the country.

A report just received from Vice Consul E. Allan Lightner, Pernambuco, states that a well-known Czechoslovak firm is actively pushing the sale of its distilleries in Brazil, and that within the past two months has booked orders from local sugar mills to install and completely equip two distilleries for the production of anhydrous alcohol.

Mexico

Refinery operations in Mexico are on about the same basis as last year, according to reports covering crude to stills and output of refinery products. Labor difficulties and local taxes are said to have caused at least one refinery operator to postpone expansion in refining facilities which would have added to its total output this year.

The three refining organizations with approximately 98 per cent of the actual crude runs to stills are: Compania Mexicana de Petroleo "El Aguila" (Shell) with plants at Tampico, Mexico City and Minatitlan; Huasteca Petroleum Co. (Standard of New Jersey) with plant at Tampico, and Pierce Oil Co. S.A. (Consolidated) with a plant at Tampico. The Shell refineries account for approximately 60 per cent of the refinery operations, Standard of New Jersey 29 per cent, and Consolidated 9 per cent. The remainder are small local plants.

The latest report covering April operations shows that these refineries ran 2,271,105 bbls. (including crude and rerun oils) or approximately 85,000 bbls. daily. From these operations the following products were obtained for the month:

	Barrels	Per cent yield
Fuel oil	1,216,624	49.11
Gas oil	227,452	9.18
Unfinished gasoline	140,864	5.68
Refined gasoline	341,585	13.79
Unfinished kerosene	37,910	1.53
Refined kerosene	84,890	3.42
Lubricants	138,726	5.60
Crude wax	81,657	3.30
Refined wax	3,856	.15
Asphalt	69,492	2.80
Misc. oils	58,277	2.35
Total	2,401,333	96.94
Loss	75,656	3.06

The following production taxes and values have been announced by the Mexican government for July (calculated in silver at exchange of 3.60):

VALUES

Fuel oil, 27.17 silver pesos per cu. meter = $1.20 per bbl.
Gasoline, 77.98 silver pesos per cu. meter = .0820 per gal.
Kerosene, 48.31 silver pesos per cu. meter = .0508 per gal.

PRODUCTION TAXES

	Tax per cu. meter (pesos)	Tax in U. S. currency (per bbl.)
Crude (sp. gr. 0.93 = Be. 20.38)	3.140	$0.13866
Crude (sp. gr. 0.96 = Be. 15.68) or heavier	1.907	.08422
Fuel oil (sp. gr. 0.95 = Be. 17.21)	2.934	.12957
Gasoline (crude)*	3.119	.00328
Gasoline (refined)*	1.560	.00164
Kerosene (crude)*	2.899	.00305
Kerosene (refined)*	1.449	.00152

*Per gallon.

The production tax on fuel oil will vary approximately .01062 per barrel for each degree of specific gravity above (deduct) or below (add) 0.95 specific gravity.

The production tax on light crude will vary approximately .01137 per barrel for each degree of specific gravity above (deduct) or below (add) 0.93 specific gravity.

EXPORT TAXES

Note: As export taxes are payable in silver at par, to make calculations in U. S. currency, take figures given below, multiply them by 2 and divide by rate of exchange at time of payment.

	U. S. currency ($1 for 2 pesos) (per bbl.)
Crude (sp. gr. 0.93 = Be. 20.38)	$0.07949
Crude (sp. gr. 0.96 = Be. 15.68) or heavier	.04928
Fuel oil (sp. gr. 0.95 = Be. 17.21)	.05962
Gasoline (crude)*	.00472
Gasoline (refined)*	.00189
Kerosene (crude)*	.00151
Kerosene (refined)*	.00057

*Per gallon.

France

Imports of crude oil and refinery products into France this year are running about 4.5 per cent ahead of last year based on data covering the first five months. The imports for that period totaled 2,549,396 tons, compared with 2,439,210 tons for the same period last year.

Calculated on a basis of 7 bbls. per ton, the imports for the five-month periods averaged 112,200 bbls. daily this year and 107,300 bbls. last year. The gains this year are all in the crude oil, fuel oil and petroleum coke ends with substantial decreases in most of the refined products. Crude oil imports averaged 93,760 bbls. daily for the first five months of this year, a gain of more than 20,000 bbls. daily over the 72,400-bbl. daily average for the first five months of 1934. Five years ago imports of crude oil were of no consequence in France, the country not having a domestic refining industry except for two or three small plants.

The following table gives the imports into France for the first five months of 1935 and 1934 (data in barrels):

	1935	1934
Crude oil	2,022,600	1,562,000
Gasoline	239,600	486,200
Kerosene	5,550	20,320
Fuel oil	161,200	134,400
Lubricating oil	44,000	69,500
Gas oil	54,610	137,550
Misc. oils	21,600	35,600

Chile

Financed by local capital and under local management, the Petroleum Co. of Chile has recently been organized to distribute gasoline on a large scale in that country, according to advices from Consul R. S. McNiece, Valparaiso, made public by the Commerce Department. The new company has completed the erection of tanks with a capacity of 2,500,000 gallons situated on the bay of Valparaiso beyond the town of Vina del Mar. The company is also understood to have a large-capacity tank in Santiago, the report states.

Arrangements have been made for gasoline pumps at convenient situations in Valparaiso, Vina del Mar and Santiago, and the work of erecting the pumps is being hurried to completion. The company's product will also be distributed through the Automobile Club of Chile which maintains its own pumps in strategic centers of all Chilean cities, the Consul reported.

For many years, the report states, importation and distribution of gasoline in Chile have been carried on by subsidiary companies of American and British organizations. From time to time operations have been conducted by small Chilean companies which have imported crude oil and by simple processes of distillation have produced comparatively small quantities of gasoline, kerosene and greases. These operations have brought a minor competition to the activities of the large firms which have had the bulk of the business.

Philippines

Having no petroleum resources, the Philippine Islands have in recent years used large quantities of alcohol in motor fuel blends, according to C. C. Concannon, Chief of the Commerce Department's Chemical Division. In most countries where alcohol has been introduced as motor fuel the movement has been supported by legislation, he stated, but in the Philippines the use of power alcohol has been voluntary, and due to its relative cheapness. A bill is now pending in the Philippine legislature, however, which if passed, will make its use obligatory, according to a radiogram just received from Manila.

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The Pennzoil Company,
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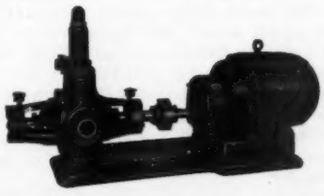

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Influence of Fitts Pool Is Extending Into Texas

By JAMES McINTYRE

THE INFLUENCE of the Fitts Pool, in Pontotoc County, Oklahoma, with its big production from the Simpson (or Wilcox) sand series, which had already made itself felt in every southeastern county in Oklahoma, has spread over into North Texas.

A block of 22,000 acres has been assembled on and around the Preston Arch in Grayson County, owned 25 per cent each by the Gardner Petroleum Co., Skelly Oil Co., Broswood Oil Co., all of Tulsa, and Charles Olson of Boston, Mass. The Olson Drilling Co. of Tulsa has been interested in the project and has agreed to drill the first well for an interest in the block. Charles Olson of Boston, Mass., and the Olson Drilling Co., by the way, are not related.

It is proposed to drill the test through the Simpson series which is expected to be found at between 3,000 and 3,500 feet, and to continue to a total depth of 6,000 feet where the Arbuckle (or Ellenburger) lime is thought to lie. The first well must be started by September 1 to meet certain lease obligations. The Preston anticline was mapped by the U. S. Geological Survey and described in Bulletin 736B.

The Simpson sand series crosses the Texas State line into Grayson County and is a prominent structural feature of the region. Shallow oil and gas wells in the bottom of the Trinity sand occur on both sides of the Red River in Marshall and Grayson Counties at depths of from 600 to 900 feet. In the vicinity of Pottsboro, Tex., the Sherman Oil Co. is pumping wells from the shallow sand. The oil is 26 gravity and is consumed for fuel in the cities of Denison and Sherman.

In the same vicinity the Simpson-Fell Oil Co. has drilled shallow gas wells from which the Lone Star Gas Co. has run considerable gas in past years. The Simpson-Fell company drilled one well on the Wall farm in Grayson County to the base of the Viola lime at a total depth of 2,457 feet. There was 600 feet of lime from the bottom up. This was the deepest test ever drilled on the block above mentioned, and is shown on the accompanying map. Fossils from the bottom part of this well were identified by Dr. H. D. Sellards, Texas state geologist, and by H. D. Miser, government geologist, as Ordovician in age, and so reported in Vol. 15 of the Association of Petroleum Geologists in 1931.

Some geologists therefore believe that a deep test on the Texas side of the Preston structure will find the Simpson (or Wilcox) sand group.

In assembling the block of 22,000 acres, James H. Gardner and Robert H. Wood, geologists and oil operators of Tulsa, took the leading part. Mr. Gardner is president of the Gardner Petroleum Co. and Mr. Wood is one of the owners of the Broswood Oil Co. A Dallas concern did the seismograph work. The Marathon, Phillips, Texas, and Sun oil companies are all said to be interested in the royalty end of the big leasing play, and no doubt when the first test starts there will be a lot of buying of leases outside the block, and possibly inside, for protection purposes.

The Simpson sand play south and southeast of the Fitts Pool has been one of the most interesting events in the history of oil in Oklahoma. For many years that part of the state was utterly neglected by the larger oil companies. Whatever work has been done there has been by the so-called "little fellows," but of late the situation has reached a point where few of the larger majors are not in the play. About 20 miles north of the Preston anticline (shown on the map) in Johnston County, Oklahoma, the Simpson sands are on the surface near the town of Bavia and dip southward toward the Red River. On the outcrop at Bavia these sands are reported as saturated with both asphalt and lighter oils in two beds each 100 feet thick. J. H. Tomlinson of the Schermerhorn Oil Co., Ardmore, Okla., has described them and his company is said to have leased that area for shallow oil wells in these sands.

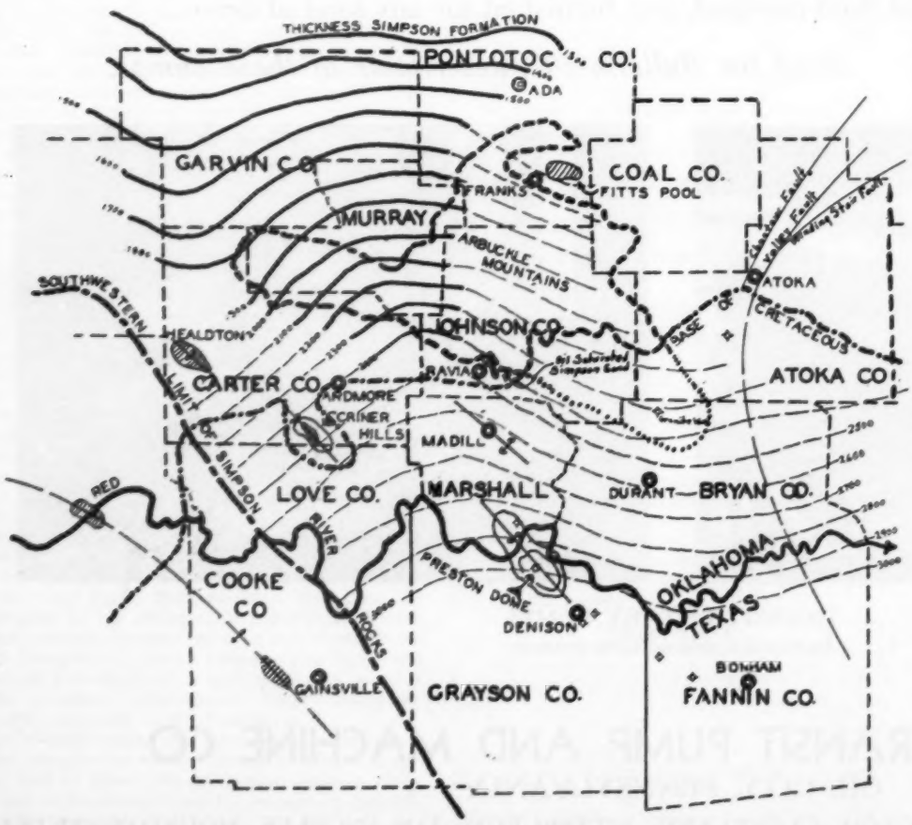
On the Oklahoma side of the Preston anticline, the Magnolia Petroleum Co. drilled a test to a depth of 4,265 feet in the NE NE Section 36-7s-5e, in Marshall County, which well is believed to have been bottomed in Carboniferous rocks, possibly correlating with the Glenn formation of the Ardmore Basin. This test was dry. In the past few months a number of companies have leased blocks and scattered properties in Marshall County with the thought in mind of drilling to as deep as 7,000 feet.

The big Fitts Pool in Pontotoc County, Oklahoma, shown on the map, is in the Arbuckle Mountains, where the formations are compressed and dip 1,500 or more feet per mile, and are cut by major faults but with richly saturated sands in the Wilcox group. This has caused geologists to take a new position with respect to their opinions on all the folds around the Arbuckle region southwest into the Ouachita, Ardmore and Gainesville Basins. Therefore it may develop that Wilcox sand production crosses the Red River into Texas.

WELLS DRILLED below the Cretaceous north and east of Denison obtained shows of oil and gas in older formations, and holes full of salt water under normal hydrostatic pressure in porous sands. The Pennsylvanian is considered by some geologists to have good possibilities around the Preston anticline, as well as the Ellenburger or Arbuckle limestone. Both these formations produce oil on the Red River Arch near Gainesville, Tex., where the rise toward the Bend Arch has cut out the Simpson or Wilcox sands by unconformity.

In McCurtain County, in the extreme southeast of Oklahoma, and near the Texas-Arkansas boundary the Ordovician formation contains the Blakely sand with a thickness of 500 feet and the Crystal Mountain sand which is 850 feet thick. Some geologists figure that these sands correlate with the Bromide, McLish and Oil Creek sands of the Arbuckle Mountains group of Simpson age. They consider the Denison area so located as to contain a transition between the Arbuckle and Ouachita sequences of these sands. In the Arbuckles the Simpson formation is 2,000 feet thick and in the Ouachita Mountains area it is 3,200 feet thick. It is said that Oklahoma geologists in their study of the whole area are inclined to abandon the old idea of a long thrust that pushed the Ouachita area to the Northwest. They believe the change in sequence is due to the original deposition and divergence which puts a more favorable angle on the oil and gas possibilities of southeastern Oklahoma and northeastern Texas in the Carboniferous and Simpson sand horizons.

The block on Preston Arch takes in all of the area in the bend of the river shown on the map, and when it gets below the bend spreads out for a distance of 8 miles east and west. It extends southerly from the river for a distance of 10 miles.



The Preston Dome in Marshall County, Oklahoma, and Grayson County, Texas. A Simpson test is to be started on the Grayson County side on a 22-000-acre block

Magnetic Storm

Tucson, Arizona observatory of the U. S. Coast and Geodetic Survey reports a severe magnetic storm started at 2:00 p.m. (C.S.T.) on July 24th and ended at 8:00 p.m. (C.S.T.) on the 26th. Telegrams follow:

"Storm began twenty-fourth. Twenty. Severe."

"Storm ended twenty-sixth. Two."

Oil and Gas to Be Big Feature at Texas Centennial

The oil industry in all its branches will be represented at the Texas Centennial Exposition in Dallas, Tex., in 1936 in the Petroleum and Gas Building, one of the most imposing on the grounds.

It is a tribute to an industry that has brought Texas and the Southwest billions of dollars that a veteran oil man is head of the exposition, Walter D. Cline, of Wichita Falls, managing director, who started in the oil fields of Louisiana as a driller in 1902. He has operated as an independent in nearly every major field in the Southwest. He drilled the discovery well on the Fowler farm that brought in the Burkburnett Field.

The exposition's Petroleum Building will include many exhibits by companies interested in various angles of the oil business. Exposition and oil officials are working together to make this department of the Southwest's first world's fair a feature. The oil show will last during the entire period of the Centennial Exposition, June 6 to November 29.

Edmond Pool Is Extended Half a Mile With Good Well

The Edmond Pool in Oklahoma County, Oklahoma, has been extended northward by Johnston & Kemnitz' No. 1 Price, SW SE NW Section 30-14-3w, at a total depth of 6,711 feet. After the well had been bailed down 2,000 feet it commenced flowing and in 20 minutes flowed about 75 bbls. of oil over the top of the derrick and then quit.

The well's next performance was to flow 809 bbls. of oil into tanks in 14 hours and 45 minutes, flowing in 15-minute intervals each 45 minutes. It produced gas at the rate of 6,000,000 feet per day, and three-quarters of 1 per cent rotary mud.

This test was reported low on structure compared with the log of the Pure Oil Co.'s No. 1 Malms, the nearest oil well, which is a half mile south of the Johnston & Kemnitz well. In No. 1 Malms, Wilcox sand was topped at 6,603 feet and in No. 1 Price at 6,670 feet. In the southern part of the Edmond Field, Marathon Oil Co.'s No. 6 Dahl, SE SW SE Section 31-14-3w, flowed 1,648 bbls. in 10½ hours with gas at the rate of 20,000,000 feet per day, with a 1,925-pound shut-in pressure. It is producing from second Wilcox sand at 6,610-6,703 feet.

The important wildcat well near Stillwater, Payne County, Stanolind Oil & Gas Co. and Amerada Petroleum Co.'s No. 1 Friedman, SE cor. Section 28-19-3, flowed 550 bbls. in 24 hours ending Tuesday morning, cutting about three-tenths of 1 per cent, producing from Wilcox sand.

Texas Utilities Merge

DALLAS, Tex., July 29.—L. B. Denning, president of the Lone Star Gas Corp., today announced the Municipal Gas Co. and the Community Natural Gas Co., distribution units of the Lone Star system, have been combined into one company.

Mr. Denning said Chester L. May, Dallas, who has been vice president and general manager of the Community Natural Gas Co. and Texas Cities Gas Co., has been named general manager of the united properties.

L. B. Denning, Jr., Dallas, has been appointed general superintendent of the companies, which serve almost 300 cities in Texas and southern Oklahoma.

Community Natural Gas Asks Revision of Its Rates

The Community Natural Gas Co., Dallas, Tex., serving 26 towns in southern Oklahoma, has filed with the Oklahoma Corporation Commission application for revision of its rates. A sliding scale is asked which would raise the price on small quantity consumption and reduce the rates on higher consumption. The application states the company has been unable to earn a fair and reasonable return on its investment under its type of service.

The rate asked by the company is $1 for each 100 feet for the first 200 feet; 80 cents per 1,000 for the next 2,800 feet; 60 cents per 1,000 for the next 2,000; 50 cents per 1,000 for the next 20,000, and all over 25,000 feet 45 cents per 1,000. The present rate is 18½ cents per 100 on the first 600 feet and in excess of 600, 67½ cents per 1,000 feet.

The company serves the following towns in Oklahoma: Hollis, Tipton, Mountain Park, Snyder, Manitou, Frederick, Davidson, Walters, Waurika, Ryan, Purcell, Wayne, Maysville, Paoli, Pauls Valley, Wynnewood, Sulphur, Davis, Elmore City, Marietta, Durant, Achille, Hugo, Caddo, Hastings and Loco.

Regal Sells Stations

CALGARY, Alberta, July 30.—Announcement was made by A. E. O'Brien, vice president and general manager of Regal Distributors, Ltd., that his company has sold to Imperial Oil, Ltd. its 12 service stations in Calgary and four in Edmonton, for an undisclosed sum. The sale does not affect the Regal Oil & Refining Co.; and Regal Distributors, Ltd., will continue the wholesaling of petroleum products in Alberta.

CONSTRUCTION NEWS

Contracts Let by Lone Star Co. for 109 Miles of Gas Line

FORT WORTH, Tex., July 30.—Lone Star Gas Co. has let contract for laying 109 miles of 20-inch gas line from the Long Lake Field in Anderson County to Irving station just west of Dallas. Oklahoma Contracting Co. is to lay 67 miles from Irving to a point between Kerens and Trinidad, and Ford, Bacon and Davis will lay the remaining 42 miles from that point to the Cayuga and Long Lake Fields. It will be a combination coupled and welded line and will be completed in about 90 days. The cost of the line is estimated at $2,000,000.

Eastern Gas Line

OIL CITY, Pa., July 29.—Work starts this week on construction of a 16-mile gas line in McKean County, Pennsylvania, and a 12-mile line tapping Allegany County, New York, and Potter County, Pennsylvania, gas fields. Both are 8-inch. The 16-mile line will be laid by Sylvania Corp. and extends from Colegrove in Norwich Township to Halsey in Sergeant Township. The 12-mile line extends from connections to the Belmont Quadrangle Development Co. at Trapping Rock, Potter County, to the Columbia Gas & Electric pump station in Proctor district, Allegany County, N. Y.

Czechoslovakia Unit

CHICAGO, July 29.—A Dubbs cracking unit is to be built at once in the refinery of Apollo Mineraloel Raffinerie A.G., at Bratislava, Czechoslovakia, near Vienna. The unit is to be of the two-coil type and capable of running to cracked fuel oil, road oil or asphalt, or to coke. In the former operation, it will have a daily charging capacity of 1,100 bbls., and in the latter 900 bbls. The charging stock is a wax distillate of 27-28 Baume gravity and a cold test of 95° F. The crude oil which supplies the refinery is produced in the Gura Ocnitzi Field nearby. It is understood the unit is to be built by the Skoda interests, world-famed munitions manufacturers, who will furnish a large part of the equipment and materials.

New Iranian Unit

Additional details have been made available regarding the design of the new 65,000-bbl. crude topping unit to be built for the Anglo-Iranian Oil Co., Ltd. at Abadan, Iran (formerly Persia).

This unit is being provided with two pipe heaters and three fractionating columns. The first column is a primary flash column of 10½ feet diameter in the top section increasing to 18½ feet diameter at the bottom section and of an overall height of 86 feet. This column will operate at 50 to 60 pounds pressure and will in effect stabilize the crude passing to the plant. From this flash column topped crude is passed into the main atmospheric fractionating column which is 22 feet diameter by 118 feet high. The residue from the main fractionating column splits into two streams, half passing out of the unit as a furnace oil and the other half going to a vacuum column 32 feet diameter by 85 feet high, where it is further reduced to a soft pitch.

With the exception of the pumps working in connection with the vacuum towers, which are steam pumps, the whole of the pumps on the unit are motor-driven centrifugals, the running horsepower involved being approximately 1,000.

The unit is being equipped with the very latest recording and control instruments, so as to render it as far as possible automatic in operation, and the whole of the controls and instruments are grouped together in a central control house so as to reduce the operating staff necessary to the minimum. The unit will produce a complete range of products from gasoline to soft pitch.

Beaumont Bulk Station

Magnolia Petroleum Co. has a signed contract with the Brownsville Navigation District, Brownsville, Tex., for a five-acre site on which it is to build a bulk receiving and distributing station on the turning basin. Work is to start within 30 days and unloading, warehouse and distributing facilities will be provided at the terminal now being designed by company architects and engineers. Cost of the project will run between $50,000 and $75,000.

Cargoes of gasoline, kerosene and lubricants are to be barged from Magnolia Refining Co.'s plant at Beaumont, Tex., to the receiving docks at Brownsville whence they are to be distributed throughout that territory. It may later be converted into a crude receiving terminal for crude piped from fields in the several counties in that district, but at the present time no pipe line project is proposed by the company.

Port Isabel Line

McALLEN, Tex., July 29.—Construction of the Valley Pipe Line Co.'s new 90-mile oil line from the Sam Fordyce Field of Hidalgo County to Port Isabel may get under way next week, according to H. H. Hensley of McAllen, general manager, who said a steamer would arrive at Port Isabel August 3, with a load of pipe and couplings.

He said right of way has been obtained and construction crews of the Freddell Construction Co., would start immediately.

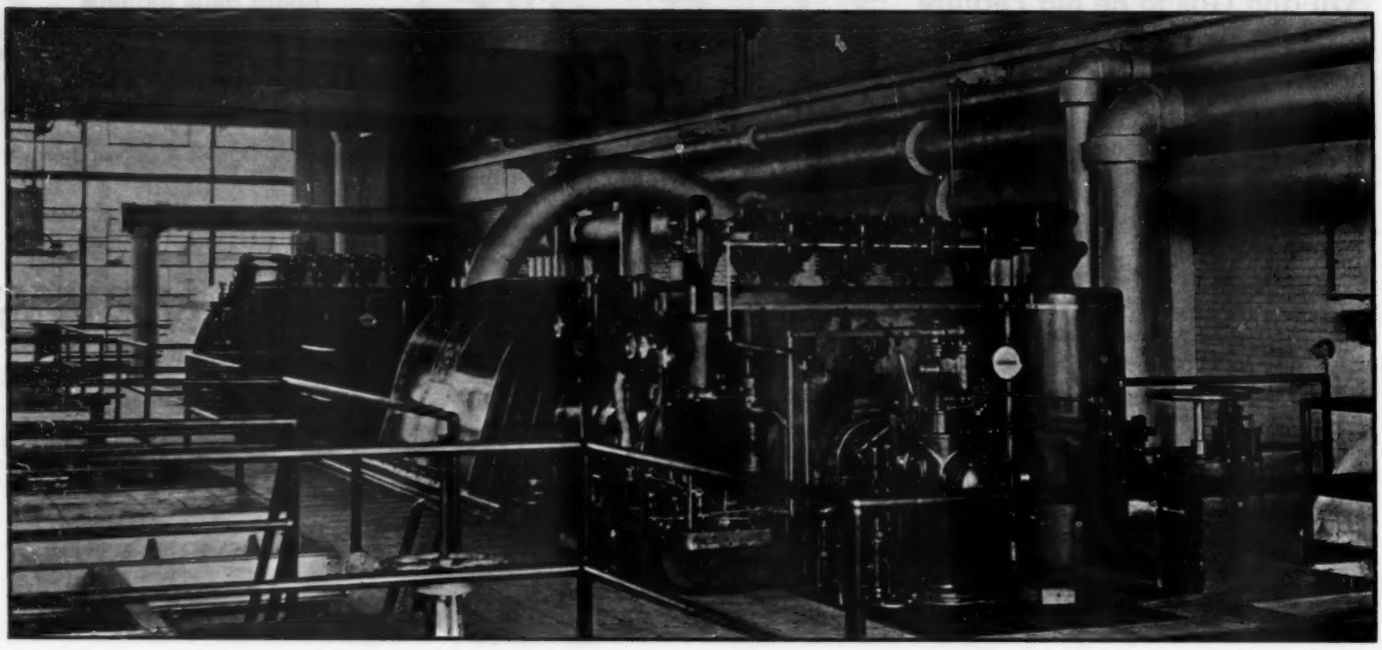
Construction of two 20,000-bbl. welded steel storage tanks will start on the company's lease at Sam Fordyce this week, Mr. Hensley said. They will be built by Wyatt Metal & Boiler Works of Dallas, which also has contracts for construction of facilities at Port Isabel for Port Isabel Terminal Co. and Valley Port Refining Co., in which Murchison and associates are interested with G. L. Rowsey, head of the Taylor Refining Co., at Taylor, Tex. The pipe line will probably be in operation early in September. It will be 5½ inches in diameter, of Dresser coupling type of construction.

Pittsburgh Terminal

PITTSBURGH, Pa., July 29.—Socony-Vacuum Oil Co., Inc., has acquired a 1½-acre site in Robb Street on which it is planned to build a large distributing station. Plans provide for construction of several buildings on the plot, 160x400 feet in size, large steel storage tanks, and loading facilities.

Gas Line to Lindsborg, Kans.

The Lindsborg Pipe Line Co. will lay a 4-inch line from the Dickey Refining Co.'s refinery in McPherson, Kans., to the town of Lindsborg, 13 miles northwesterly. The Dickey Refining Co. will supply the gas from its Tull lease in the Chindborg Pool in McPherson County.



Interior of power house at Beaumont, Tex., refinery of Magnolia Petroleum Co.

Magnolia's New Refinery Power Plant Allows for Changing Steam Loads

By GEORGE WEBER

THE POWER PLANT in the Beaumont, Tex., refinery of the Magnolia Petroleum Co. serves the dual purpose of supplying process steam and electrical power, the latter being considered the secondary product. The needs of a refinery greatly modify the design of a steam power plant. Steam pressures and yields, fuel sources and steam transmission are controlling factors in drawing up plans for such a plant.

TABLE 1—STEAM FROM POWER PLANT TO YARD SYSTEM

	High pressure	Low pressure	Exhaust
Lbs. steam to yard ...	185,000,000	4,370,000	53,085,000
Avg. press. (lbs. G) ...	155	12	9
Avg. temp. (deg. F.) ..	550	260	250
B.t.u. per lb.	1,298	1,168	1,165
Deg. superheat (f) ...	187	12	13
Per cent moisture	0	0	0

At this refinery the main power plant is situated in proximity to those refinery units which utilize the greater part of the low pressure or exhaust steam from the generator turbines. The boiler house containing space for six boilers is of structural steel and brick construction with one false galvanized iron wall providing for an ultimate extension to house four additional boilers.

At present, four 1,500 horsepower Babcock and Wilcox Stirling bent tube boilers capable of continuous operation at 300 per cent of rating, are installed for natural gas, fuel oil, acid sludge or powdered coke. They are spaced with wide firing aisles to make room for coke storage overhead and pulverizers on the floor. Two of the boilers are now equipped for coke burning. Each requires a ball mill large enough to pulverize and feed a boiler at peak load.

The air for all four of the boilers is drawn through the boiler walls where it is heated to about 250° F. Forced draft fans draw it from the settings, through the wind tunnel and discharge it into the wind boxes. Induced draft, turbine driven fans located above the boilers pull the flue gases through the economizers and discharge to a breeching on the roof. This breeching extends the full length of the building and leads to the 177-foot chimney. The stack gas averages 400° F. The temperature is held at this point to preclude condensation of any acid in the breeching of chimney should acid sludge ever be burned in the boilers. A mixture of natural gas and cracking still gases is now being fired.

About 400,000 pounds of 425-pound steam per hour is supplied by the main boiler house. All of this with the exception of that discharged to the continuous blow-down system, is fed to the turbines located in the turbine bay at the side of the boiler room. The turbines are of extraction type. The demand for process steam at 150 pounds pressure necessitated this design. The steam enters the turbines at 400 pounds and a maximum of 87 per cent may be bled off at the 150-pound stage for discharge into the refinery yard main. This 150-pound steam is de-superheated to about 75 to 100 degrees of superheat before it is admitted to the main.

Table 1 shows the distribution of steam at the three pressures for a representative month of operation.

A second extraction is possible at the 25-pound stage. At this point facilities allow for steam to be either extracted or injected. In this way the 25-pound steam supply may be balanced, the turbine supplying steam in periods of deficiency and absorbing it in cases of an excess. A back pressure of 10 pounds is held on the turbines. The 10-pound steam is used in the steam stills. Thus all of the steam serves a second purpose after part of its energy has been utilized in the generation of electricity.

Table 2 shows the breakup of steam supplied by the main boiler house over a period of a month.

Auxiliary turbines operate on 400 pounds steam pressure with 150 pounds back pressure. The exciter turbine operates on 400 pounds steam with 10 back pressure.

Electrical power for the refinery is furnished by two 7,500 KW General Electric Curtiss type turbo-generators with direct connected exciters. They are of 60 cycle, 3-phase, delta connected design rated to deliver current at 2,300 volts and a power factor of 80 per cent. A direct connected

TABLE 2—HEAT BALANCE OF MAIN BOILER HOUSE

	Av. pr. lbs. G.	Avg. temp. °F.	Lbs. steam	H per lb.	Total B.t.u.
Steam evap. by main B.H.	370	710	238,916,000	1,360	324,856,000,000
Total steam to turbine	370	710	151,300,000	1,360	206,000,000,000
150-pound exhaust	155	550	185,000,000	1,298	240,000,000,000
150-pound turbine exhaust	155	550	93,845,000	1,298	121,800,000,000
25-pound exhaust	12	260	4,370,000	1,168	5,100,000,000
25-pound steam from yard	13	247	3,539,000	1,162	4,110,000,000
10-pound exhaust	9	250	53,085,000	1,165	61,844,000,000
Steam through reducing lines	370	710	35,655,000	1,360	48,500,000,000
Steam to auxiliaries	370	710	55,500,000	1,360	75,500,000,000
Auxiliary exhaust	155	546	55,500,000	1,290	71,600,000,000
Used by auxiliaries	...	...	.....	....	3,900,000,000
Used by turbines only	...	...	.....	....	18,122,000,000

Per cent of heat extracted by turbine to total heat supplied turbine 8.80%
Per cent of total heat left in steam leaving plant relative to total heat in steam evaporated by boilers .. 93.2%
Per cent of total heat absorbed by auxiliaries, turbines and losses 6.8%

turbine driven, 250 volt D.C. compound wound exciter will supply sufficient excitation for one of the generators. This is maintained for emergency. In actual operation a power factor of 88 per cent is attained allowing a KW output of 85-8,600 as compared with the 7,500 KW rating. Timing of the generator cycle is very carefully controlled. This is necessary for the accuracy of the many recording instruments in the refinery.

The switch gallery contains two 3,000 ampere generator cubicles, five 800 ampere feeder cubicles and two 800 ampere house cubicles. The switches on the main switchboard are motor operated and the main board is operated from a control board equipped with indicating and recording instruments and relays.

About 90 per cent of the boiler feed water is composed of fresh make-up. This together with the fact that the water is especially difficult to treat makes the water treating plant an important part of the system. The treatment used is known as the "Cochrane hot process." An ell-shaped building next to the boiler house was built for this purpose. It contains storage space for chemicals on the second floor. The pumping and mixing equipment is located on the main floor and outside between the building and the boiler house.

The water supply is obtained from the Neches River above the point where salt water exists. It has a high content of suspended matter and is relatively devoid of soluble material. This necessitates the addition of more than the usual amount of chemicals to render the water suitable for boiler feed. Furthermore, there is often a change in the amount and nature of the impurities in the water requiring a constant check on treating methods.

The unfiltered water is brought first through a jet heater where it is raised to within 5 degrees of steam temperature. This removes most of the air from solution. The hot water then is discharged into a sedimentation tank where it is mixed with magnesium sulphate, ferrous sulphate, lime, soda

TABLE 3—BOILER WATER ANALYSIS

	Grains per gallon	
	Raw	Treated
Total solids	11.18	16.67
Ph value	6.9	10.8
Organic and volatile matter	1.84	.92
Iron and aluminum oxides	1.14	.44
Acid (insoluble)	2 33	.58
Calcium	.60	.40
Magnesium	.27	.06
Sodium	.80	4.62
Bi-carbonate	1.82	.73
Carbonate	.00	1 75
Sulphate	.90	5.94
Chlorate	1.35	1.13
Total hardness ($CaCO_3$)	2.63	1.00
Permanent hardness ($CaSO_4$)	1.28	.00

ash and sodium sulphate. These chemicals are apportioned automatically by special pumps and the total amounts added are controlled by the flow of raw water into the tank. The magnesium sulphate aids the ferrous sulphate in coagulating the suspended matter. The coagulated matter settles to the cone-shaped bottom of the sedimentation tank and is withdrawn as a thick sludge.

The ferrous sulphate is also required to complete the deaeration of the water. To prevent caustic embrittlement, sodium sulphate is added in sufficient quantity to maintain a sulphate-carbonate content well above the 3 to 1 ratio required in the American Society of Mechanical Engineers Code.

From the sedimentation tank the water is passed through crushed limestone filters and is pumped to the economizer banks in the boilers. Here it is heated from an average temperature of 235° F. to 340° F. and is discharged to the boilers. In addition to the regular scale formation treatment by soda ash and lime, sodium phosphate is mixed with the water as a final scale prevention agent. It is prepared in separate mixing tanks in the treating house and is pumped directly to the boiler drums by special proportioning pumps, one to each boiler. Thus any silica not removed by the lime and soda ash is made soluble and removed through the continuous blow-down system.

Of the total of 8,500,000 to 10,000,000 pounds of steam produced per day additional water must be treated for the 3-4 per cent of blow-down. However, about 60,000 pounds per hour of steam is main systems. The major part of this network transmits high pressure steam at approximately 145 pounds. In addition to the extraction steam from the generator turbines, two other boiler condensed in exchangers and lines and returned to the boilers without treating.

Besides the main power plant, three other boiler houses in the refinery supply steam for process

Jet heater and sedimentation tank for water treating system

and power uses. All are connected into the yard houses supply high pressure steam to this system. Another boiler house produces steam at 160 pounds for special use in some adjacent refinery units. It is equipped with reducing valves for admitting excess steam to the 150-pound line. Some of the smaller boiler houses fire acid sludge and refinery waste.

Super-Highway

"Building of a great transcontinental super-express highway from coast to coast, with feeder roads reaching out to every part of the country is once more being strongly urged on Congress and may be incorporated in the plans for the disposal of the $4,800,000,000 work relief project," John D. Collins, general sales manager of Tide Water Oil Co., says.

"Many senators and representatives are urging President Roosevelt to reinstate the proposal in his plans. He originally ruled out this program on account of what he then thought was too high a cost per man employed," said Mr. Collins.

"However, at this time, not all the benefits accruing from such a plan was evident. The project would provide employment for thousands in virtually every state. It would provide for local and interstate traffic, offer a wide right of way for omnibuses and trucks as well as passenger cars, promote interstate communication, develop new commercial centers, reduce shipping costs and greatly facilitate automobile traffic."

California's Gasoline Tax

SACRAMENTO, Calif., July 30.—For the first time since April, 1934, California gasoline taxes showed in June, 1935, a gain over those for the corresponding month of the previous year. The total was $3,823,327.44, an increase of $374,380.06 over June, 1934, a gain of 10.85 per cent. Fred E. Stewart, board member, said the gain, so far, offset losses for the earlier part of 1935 so the total taxes for the first six months would exceed those for the first half of 1934 by $295,899.90, or 1.47 per cent.

East Texas Suit

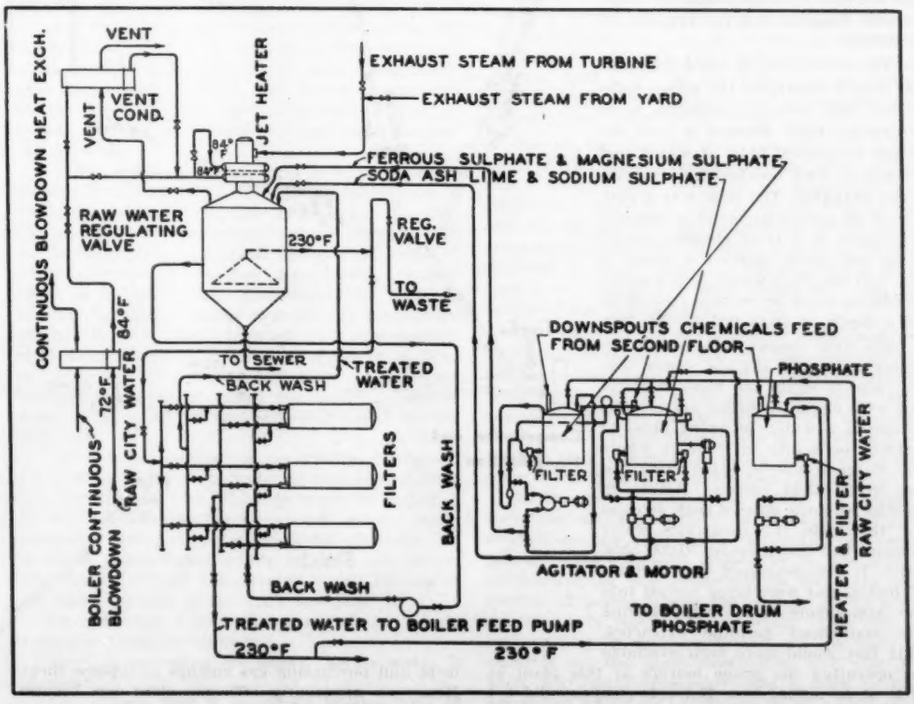
WILMINGTON, Del., July 25.—The Universal Oil Products Co. of Chicago filed suit in U. S. District Court today, charging the Tyler-Texas Oil & Refining Co. with infringements of a patented process for cracking oil.

Universal, a South Dakota corporation, asked the court for an accounting from the Tyler-Texas company of profits accruing from the alleged infringements, payment of the profits to the plaintiff company and an injunction restraining the defendant company from further infringement.

The Tyler-Texas company is a Delaware corporation, operating in the East Texas Field.

New Skiff Refinery

SKIFF, Alberta, July 30.—Devenish Petroleums, Ltd. has completed its refinery in the Skiff Field and will probably start running crude this month. It will take production of the Devenish wells, from which 1,000 bbls. has been produced and placed in storage.



Flow chart of water treating plant

Supply of Water for Lease Purposes May Be Developed by Planning

By I. F. BINGHAM

School of Petroleum Engineering, University of Oklahoma, Norman

THERE IS probably no factor involved in developing and producing an oil field more important than an adequate supply of good water. It is scarcely necessary to present figures to support this truth. An inadequate supply of oil field water coupled with poor quality of the water will, over a period of years, result in huge losses. These losses will include visible losses which may be reduced to definite values and intangible or indirect losses which may not easily be reduced to figures. A close inspection of operations, over an extended period, upon properties where there has been a shortage of water and where the quality of the water is poor, will reveal one or more of the following losses: (1) Injury to employes; (2) excessive depreciation of equipment; (3) excessive maintenance and replacement costs; (4) increased pay roll; (5) expensive delays, and (6) lost production.

There is probably no other engineer in an organization who assumes more serious responsibility than that engineer detailed to the task of supplying his company with a proper amount of good water in a new field. It devolves upon him to furnish sufficient water to care for the peak demand and yet keep within reasonable cost per barrel limits during those times when activity is not brisk or when the field shall decline. While a certain amount of error must be tolerated because of inability to predict the future extent of the field, all available facts should be weighed carefully before deciding finally upon the plan. Very often the only difference between a satisfactory water system and a poor water system in the same field is the difference between the original plans for the system in question. It does not necessarily follow that the better system demands a great original investment.

The writer has in mind an example which illustrates the above statements. One company operating in an Oklahoma field reached a peak demand of 250,000 bbls. of water each 24 hours. Two inexhaustible sources were available. The first was a matter of 26 grains hardness which had its source in a river channel and in river bed quick sand at a depth of 30 to 60 feet. Soft water, 3 to 5 grains hardness, could be secured from wells at a depth of from 600 to 800 feet.

The first company chose to secure water from the shallow water supply, also to equip the plant throughout with electrical prime movers and to install a water softening plant to reduce the solids to a point where the water would be satisfactory for use in oil field boilers. Within 18 months from the date of peak demand for this field the company's water demand had fallen below 50,000 bbls. daily. It also developed that millions of feet of gas were being vented into the atmosphere daily after having the casinghead gasoline extracted. This fuel would have been available for operating the prime movers at this plant at little or no actual cost. But this company did not feel justified in discarding the electrical equipment and purchasing gas engines to replace them. Hence an apparently efficient plant has become comparatively costly as to installation and operation because of failure to forecast a changed situation. Another company operating in the same field chose to drill a number of wells to the soft water producing sands occurring at depths ranging from 600 to 800 feet. Salvaged compressors were used to compress air for lifting the water. Gas which would otherwise have been wasted was used as fuel. Temporary quicksand wells were used as an auxiliary supply during the period of peak demand occasioned by the drilling campaign. As development progressed, additional deep wells were added to bring the soft water production up to normal operating demands. This plant now operates at a relatively low per barrel cost, free from the problems attending water conditioning.

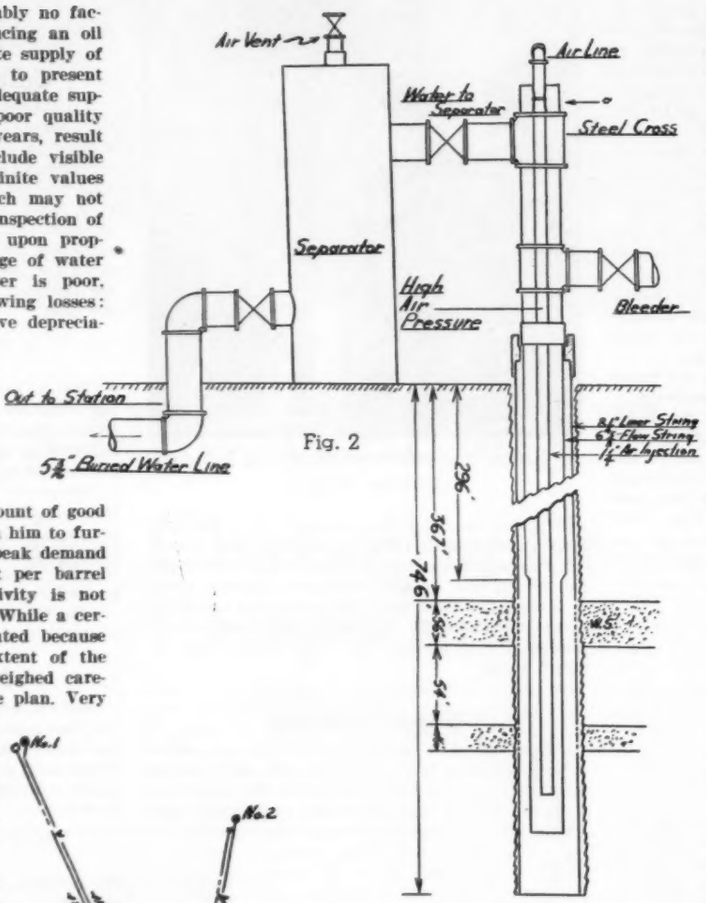


Fig. 2

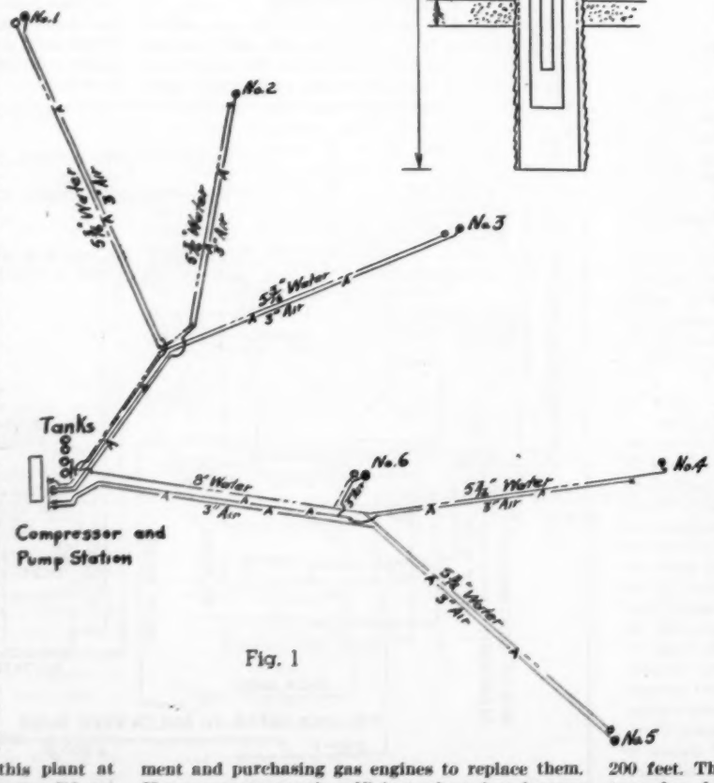


Fig. 1

Factors which should be considered before developing a water supply system will vary with the area but the engineer will do well to weigh carefully the following general factors for any field:

1. The volume available independent of seasonal rainfall.
2. Flexibility of the plant to meet changing demand.
3. Types of power available and comparative cost over a period of years.
4. Contemplated rate of development should be forecast to arrive at an approximate comparison of periodic demands. A rotary drilling well will require from 2,000 to 2,500 bbls. of water each 24 hours.
5. The possibility of avoiding water conditioning problems.
6. The comparative power input required to lift equivalent volumes of water equal distances by air lift; centrifugal pumps; pumping power and sucker rod pumps; and rod pumps operated with steam heads.
7. Power demand factor where electric power is used.
8. The possibility of making use of salvaged equipment for the plant.
9. Probability of revenue through sale of water.
10. The probable depreciation and maintenance saving by virtue of using water free from suspended and dissolved solids.

There are several sources of oil field waters. No comprehensive classification according to importance can be made for the obvious reason that what constitutes an important source for one area may not be present in another area. The sources which are discussed below are of most frequent occurrence.

1. "Shallow" water wells or "surface" water wells may be used to designate those wells where water production is secured at depths ranging from a few feet up to roughly 200 feet. The water may or may not be satisfactory for development uses depending upon the concentration of soluble solids as shown from an

analysis of the water in question. The principal factors which limit the application of this type of wells to the oil industry are limited volumes and dependence of this supply upon seasonal rainfall.

The limited volumes which this type of wells will supply are due, in general, to the relatively thin sections of the source rocks, the absence of hydrostatic head, and the limited area of the local source rock. The latter factor is especially important and is easily explained by the fact that local erosion cuts through these source beds in producing local drainage systems, and much of the water from these shallow beds is lost through springs and seeps.

Lack of hydrostatic head is important. Assuming surface beds contain sufficient water to make them commercially profitable, it is necessary sufficient head be available to produce the water at the bore hole at a minimum rate of about 75 gallons per minute. It is possible to lift water from shallow wells which will produce 75 gallons per minute for about 15 cents per 1,000 gallons. A review of 225 wells* in 26 counties in Oklahoma reveals but a single well producing at depths less than 200 feet with a per-minute capacity sufficient to justify equipping it for oil field water production. More than half of these wells had a per-minute capacity of less than 1 gallon, notwithstanding these wells had an average bore hole diameter of about 24 inches. The minimum diameter was 6 inches except where sand points were driven and the maximum diameter was 360 inches.

2. Deep water wells, ranging in depth from 400 to 1,000 feet, frequently furnish water in sufficient quantities to give them importance as a source for oil field waters. This source is particularly important if the source rock is sandstone and does not carry enough soluble material to produce a hard water. Information concerning the existence of such a source for any new field may usually be secured from state geological survey papers covering the state water supply. If such information is not available for the particular area, a test well is justified. If these wells produce at rates upward of 100 gallons per minute they may be produced economically by one of the following methods:

(a) By gas or air lift.

(b) By multiple stage centrifugal pumps driven by gas engines or electric motors.

If the wells are of somewhat smaller capacity it may prove more economical to lift the water by one of the following methods:

(a) By steam heads, directly connected to the sucker rods.

(b) By rod pumps operated from a central pumping power, where the water wells may be so grouped as to make this possible.

(c) By a crank on the opposite end, and set at 180 degrees to the pitman crank on the band wheel shaft at individual oil well pumping units.

For water wells pumped with oil well pumps the stroke and displacement diameter should be adjusted to the well capacity for if the well is overproduced the water will likely become turbid from mud or sand.

3. Rivers and river bed sands are important sources for oil field water supply systems. A combination of the two sources is desirable in that the wells from the river bed sands will continue to supply water when the water in the river channel is very low from extended droughts. Water from these sources usually possesses the disadvantage of "hardness." The water from river bed sands usually carries more solids in solution than water from the same river channel. This is particularly true during flood stage. On the other hand, water from the river bed sand does not carry solids in suspension as does the water from the river channel.

It is usually essential to operate a water softening plant to treat water from this source.

Since the supply from this source is plentiful, the water may be lifted by centrifugal pumps. The sumps for the collection of the water may consist of two concentric perforated caissons driven to bedrock with the intervening annular space filled with gravel. This practice may be varied by sinking a single, large diameter, blank caisson to bedrock. Screen covered "sand points" extend radially through the caisson and into the sand to admit the water to the sump formed within the caisson.

4. Natural and artificial lakes or reservoirs constitute an important source for oil field water. If a natural reservoir is located in the area, this may be the most economical source of supply. Artificial reservoirs may be constructed to care for the water supply for an oil field, but the following factors should be considered:

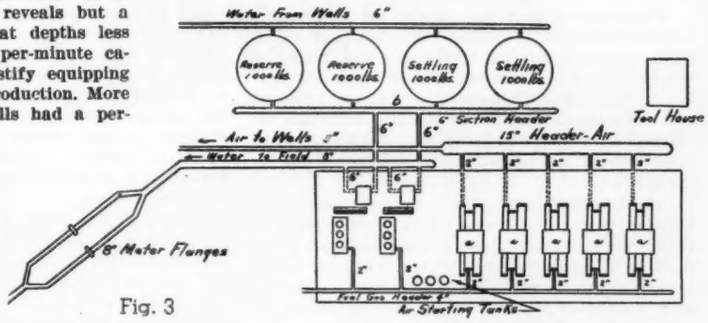


Fig. 3

Oklahoma City water station, Phillips Petroleum Co.'s Berg lease

Pumps: 5-stage centrifugal, V-belt drive, average working pressure 175 lbs., average capacity 175 bbls. per day. Pump engines: 3-cylinder, vertical, 160-horsepower. Compressors: Engine end 12"x16", air end 11"x16"x6¾", 240 r.p.m., maximum pressure 300 lbs.

(a) Is the available watershed sufficient to furnish adequate water throughout the year?

(b) Can the installation cost be amortized during the expected producing life of the field?

(c) Will it be necessary to treat the water to remove soluble salts?

(d) Is the nature of the surface soil such that the water remains turbid for the greater part of the year?

(e) What are the prospects for deriving revenue from the sale of water?

(f) How does the yearly evaporation compare with the yearly precipitation?

(g) Can the surface rights for the location of the reservoir be secured at a reasonable cost?

If a sufficient number of the factors are favorable this source of water may be the proper one for the field. Of course part of the installation expenses are eliminated where a natural reservoir can be secured.

5. City water supply systems have in some instances furnished water for drilling operations in fields located near the city in question. Usually this source is unsatisfactory because the city supply is inadequate to furnish the amount required when development reaches considerable proportions. It is usually true that during the summer months city water supply systems are inadequate to care for the usual demands and consequently cities must curtail sales for the purpose of oil field development. This source is further unimportant because the price at which the water is sold is usually too great to make it economical for oil field use.

Through the courtesy of the Phillips Petroleum Co. a description of its water system at the Berg lease, Oklahoma City Field, is herewith included. It would be interesting to present several other successful water supply systems for oil fields but to do so would unnecessarily lengthen this paper. The description of the system which follows is presented because of the attractive features:

(a) Salvage equipment was utilized largely throughout the installation.

(b) No softening treatment of this water is necessary.

(c) Cheap fuel is available in the form of residue gas.

(d) The supply of water is not subject to seasonal rainfall.

(e) Increased capacity may be accomplished by drilling additional wells and increasing the compressor capacity without making any expensive changes in the physical plant.

A schematic diagram of the system is shown in Figure 1, while a flow sheet is shown in Figure 3. Casing, air injection line, and separator are shown in Figure 2. The five compressors (Figure 3 at "a") discharge into the header from which the injection air is carried through 3-inch lines to the wells. The 1¼-inch injection tube is suspended from the 6⅝-inch flow string by a tubing support (Figure 2 at "a"). The water is lifted by aeration and discharged through the 6⅝-inch flow string into the separator, Figure 2. The valve on the separator vent is pinched to hold sufficient pressure upon the separator to force the water through the 5⅛-inch lines to the 1,600-bbl. storage tanks, without the use of an auxiliary pump. Sand produced with the water is drawn off at the base of the separator. Air produced with the water is discharged at the separator vent (Figure 2).

Water from the 6-inch suction header (Figure 3 at "b") is picked up by the 5-stage Gould centrifugal pumps and discharged into the 10-inch field line at a pressure of approximately 175 pounds per square inch.

The personnel required to operate this plant is operators for the pumps and compressors housed under one roof shown in Figure 3. This plant is producing water of three grains hardness at a nominal cost.

NOTE: This is the first of a series of three articles written by Prof. I. F. Bingham discussing the means for supplying useful water in the operation of oil-producing properties.

*U.S.G.S. Bulletin No. 148.

Cable Tools Used Extensively in Upshur, Texas, Field

Of interest and in contrast with the conventional rotary drilling practices which have been followed exclusively in development of the East Texas Field, cable tools are being used effectively in proving the new extension area recently opened by Ben G. Barnett and associates of Houston on the extreme north end of the field in Upshur County. They anticipated drilling approximately 50 wells on their block of 800 to 900 acres and are keeping two rigs running continuously in a consistent development program.

Of particular interest is the fact the acreage had been looked upon as condemned and drilling was undertaken in face of adverse judgment of the majority of operators. Between the acreage and the field a line of dry holes and salt water wells had been drilled considered as absolute definition of the limits of the field.

One of the Barnett wells is fully 1½ miles north of the nearest producer of the field proper, and a quarter mile north of an abandoned test drilled by Daisy Oil & Gas Co. on the Phillips fee. Although by the contours established in the earlier development, the Barnett wells would have been expected to make water, so far they have made only clean oil and are rated among the best producers of the field proper.

The sands of the northeast extension are undoubtedly Woodbine in age and mapping the section indicates there has been a downwarping of the structure at the north end of the field. It is estimated that the water level in the formation north of the Upshur County line is —3,355 feet below sea level whereas the water level for the balance of the field was —3,320 feet originally.

In the use of cable tools, which this development has initiated to the field, the operators have worked on the assumption important productive potentialities are being passed up by the rotary, particularly in thin sands and in the main sand section at points where the margin of oil above the water is comparatively small. They are of opinion that by cable tools they can log more accurately all the sand possibilities and also feel their way more cautiously into a sand to keep above the water, and complete in very thin sands which would be different by rotary.

Preserving the Safety, Longevity and Efficiency of Cracking Equipment

By O. E. ANDRUS
A. O. Smith Corp.

OIL CRACKING as an industry was for a time most hazardous because of the combination of factors involved. These factors including corrosion, high temperatures and erosion explain why the cracking industry, during its infancy, was harassed by frequent disasters and was burdened by excessive cost of equipment and operation. Present day refineries have greatly lessened the hazard principally by controlling the factor of corrosion.

Carbon steels and low allow steels in general are attacked at cracking temperatures, by oils containing impurities such as sulphur compounds. It is customary to compensate for this attack by reducing the allowable working pressure or temperature each time inspection shows it to be necessary.

Refiners were alert in seeing the possibility of temporarily preserving cracking vessels by constructing them with excess wall thickness. As long as relatively noncorrosive oils were processed, this compensation was effective for quite a period. In conjunction with temporary coatings, excess wall thickness proved beneficial since corrosion still caused a reduction in the thickness at local areas as progressive failure of these coatings occurred. However, the practice of building the vessels with excess wall thickness is now giving place to more effective and economical methods of preservation.

One of the first outstanding metallurgical developments of importance to the cracking industry was the introduction of arc welded vessels. Previously, the refiner was forced to use relatively small forged vessels or thin-walled vessels of riveted or hammer-welded construction. Corrosion caused a rapid and oftentimes serious weakening, particularly of the latter type of vessels. The construction, made possible by welding with properly covered electrodes, opened the way for dependable joints, larger sizes, and heavier walls, thus improving longevity and efficiency. In some instances ganister linings have been used. They consist essentially of inert aggregates bonded with cement and sprayed on the steel.

Refractory paints have been tried as a means of internal protection for vessels, but have given little satisfaction because of porosity and susceptibility to mechanical injury.

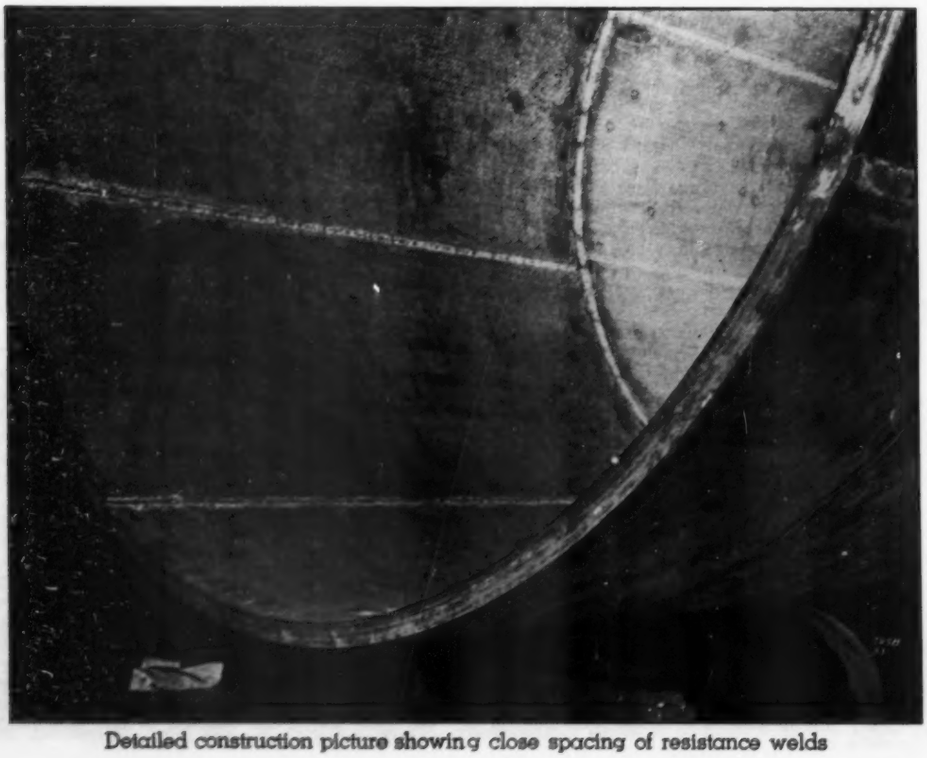
Chromium plating was one of the first metallurgical attempts to combat corrosion, and means were developed for its application and repair at the refinery. The chromium deposit remained inert chiefly because of the formation of a very adherent and resistant film upon its surface. Although unaffected by corrosion, the plating was found to be susceptible to mechanical injury and somewhat expensive to apply.

Another metallurgical development deserving mention is that of sprayed aluminum. Comparatively thick deposits are reported to have given protection for some time except when subjected to mechanical abuse. This coating can be applied to new or old equipment and replacements can be made at the refinery when necessary.

Since all cracking equipment, with the exception of that permanently lined, is subject to corrosion to some degree, refiners have established a practice of periodic inspections to determine the limiting wall thickness so that an estimate of the safe working pressure can be made. In the past, this determination has been made by drilling a few test holes through the vessel. An improved inspection facility, developed and patented by the writer and suitable for use in all vessels built without permanent linings, consists of noncorrosive alloy buttons or plugs welded to the wall at convenient locations. These buttons or plugs eliminate the necessity for drilling holes, since, as corrosion progresses, they stand out in relief, thereby enabling the inspector to quickly and accurately determine the corrosion loss and any distortion of the vessel.

But the aim of the refiner is a dependable and economical vessel that completely resists corrosion. Recently metallurgists developed the use of carbon steel for load carrying purposes in conjunction with a substantially permanent stainless alloy lining of appreciable thickness. It is applicable to any or all load-carrying sections of vessels, including the shell proper, heads, manways, nozzles, gasket seats, etc. One-inch spacing of the welds is preferable for oil cracking service because of the severe temperature conditions involved. This method of construction insures freedom from porosity, uniform composition throughout, and permanency of attachment even under rapid temperature changes.

Alloys of the high-chrome and chrome-nickel types are most suitable for lining material in oil service. The first sheet alloy lined cracking still was equipped with the latter type, and although this lining suffered intergranular corrosion, it is still giving complete protection for the load carrying steel. Alloys of this composition are now available, which are not subject to such attack. All installations so far made, including those that have given constant service for four and five years, have furnished 100 per cent protection to every portion of the load carrying steel so covered.



Detailed construction picture showing close spacing of resistance welds

Construction Improving

The nation's principal manufacturing industries have now been forced into the market for construction and machinery, in order to meet production requirements for their own goods, George A. Bryant, Jr., executive vice president of the Austin Co., Cleveland, national organization of engineers and industrial builders, said today.

"Proof of this fact is to be found in expenditures involving more than $10,000,000 for expansion, modernization and equipment of plants where we are now engaged in active building construction," Mr. Bryant said. "The first half of 1935 yielded us 100 per cent more industrial construction business than we had in the first six months of 1934, which already represented two years of recovery from the low of 1932. This is an impressive advance, which bids fair to continue.

"Work now under way represents the rush to fulfill industrial needs which cannot be put off any longer without serious consequences, either by weakening of competitive position or through continuation of loss producing efficiencies."

Texas Triangulation Order

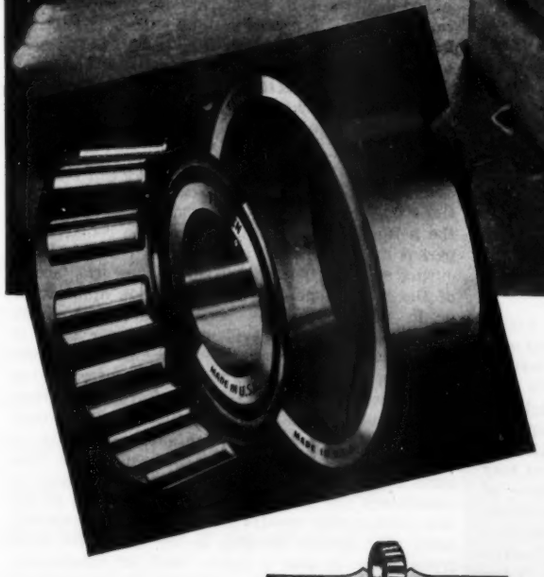
First Order Triangulation in Texas (1927 datum) U. S. Coast and Geodetic Survey Special Publication No. 189, 431 pages, 48 figures, mostly sketch maps, Washington, D. C., 1935, compiled by Hugh C. Mitchell, is ready for distribution.

The book gives a detailed description of triangulation stations, the latitude and longitude of the stations to thousands of a second, the distance between stations at sea level, the elevation of many stations, the latitude, longitude and elevation of many objects such as water towers, church spires, windmills conspicuous from triangulation stations.

The present book supersedes Appendix 6 Report for 1901, Appendix 4 Report for 1903, Appendix 5 Report for 1905, Appendix 5 Report for 1911, Special Publications 11, 54 and 88, but not 17. For sale by the Superintendent of Documents, Washington, D. C., 50 cents.

DEPENDABLE POWER with the Crankshaft TIMKEN-EQUIPPED

Cooper-Bessemer Type G-AO Diesel Engine equipped with Timken Bearings on the crankshaft installed at the plant of the Stanolind Oil & Gas Company, Hutchinson, Kansas.



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Cutback Asphalt and Road Oils Used in Modern Highway Construction

By H. G. NEVITT
Socony-Vacuum Oil Co., Inc.

THE OUTSTANDING highway development of the past few years has been the tremendous increase in the use of bituminous mats, particularly of the asphaltic type. Bituminous surfaces today form the greatest per cent of the highway mileage classed as paving. This percentage is increasing due to both the greater realization of its advantages, and the increase in the mileage of surfacing on lower traffic county highways. The outstanding reason is the engineering suitability and tremendous economic advantage of this type for all but the heaviest primary traffic.

In this wide use both road oils and cutbacks are being utilized, with an increasing trend towards the latter. Consequently a comparison between these two types of binders, with a discussion of their relative merits, is evidently desirable from the standpoint of both the user and manufacturer.

Asphalt is essentially the basis of both road oils and cutbacks, and its nature should be understood. Asphalt is a constituent of petroleum found in a natural state occasionally, but generally made by the reduction of crude oil. It is not a fixed substance, but essentially a mixture of various compounds of carbon and hydrogen. From a practical standpoint for the layman it may be thought of as a semisolid material, composed of two constituents; namely, an asphaltene portion (or a hard brittle solid cement) softened by a petrolene portion (or heavy oil resembling lubricating oil), the consistency or penetration being set by the relative amounts of the two constituents. This classification does not exactly correspond to the present accepted chemist's description, but is a very handy one for practical use, just as we often think of aggregate as being made up of a mixture of sand and rock even though it shows a definite gradation from the largest to the smallest particle, with different types of materials present.

ASPHALTS, SUCH AS road oils and cutbacks, may be then described as a mixture of asphalt and lighter oils. They are classified into three groups, depending on the solvent or light oil with which the asphalt as previously defined is mixed. The rapid curing cutback asphalts have a highly volatile material, or petroleum naphtha, as their solvent. Consequently in use they dry or cure rapidly due to the rapid evaporation of this solvent, leaving the original asphalt in place as a residue. The medium curing cutbacks are made with a somewhat heavier distillate, about like kerosene. Their rate of drying is accordingly somewhat slower, but the material is sufficiently volatile that the asphalt component is definitely left as a residue in due course. The slow curing oils have a heavy distillate, or gas oil, similar to lubricating oil, as the nonasphaltic component of the product. In theory this oil ultimately evaporates, leaving the asphalt as a residue. Actually most slow curing products have such a heavy oil component that very little of it evaporates in use over a number of years, although there are exceptions to this rule, particularly where in addition to evaporation there is removal of the nonasphalt constituent by absorption into the aggregate. Occasionally there is apparent formation of a residue because of evaporation or absorption, which is actually an increase in consistency of the original material due to chemical change. In practice these slow curing products are described as road oils, while the rapid and medium curing products are called cutbacks; yet they all have the fundamental similarity that they are a semisolid asphalt made liquid due to the presence of a nonasphaltic oil.

From the nature of these products the methods of manufacture may be the same, but are usually different for the cutbacks and the road oils. The former must be made by separating the crude material into asphalt and distillate fractions, each to its proper character or specification, and then combining the desired fractions in suitable amounts to make the product. The same process may be followed in making road oil but since the nonasphaltic constituent of road oil is the oil fraction distilling just before the asphaltic residue is left, it is possible to make road oils by merely removing the lighter distillates from the crude oil. Very evidently this tends to make road oils cheaper to produce, since a complete distillation and recombination are not involved. However, it also removes the possibility of control over the two components; and to manufacture a road oil by this common method reduction must be made to the desired consistency, with the resulting asphalt and oil constituents present in the crude material. In other words, the manufacturer, subject to some degree of later modification, must take what he has in the raw material, wtih relatively little control over it. This practical manufacturing situation leads to a commercial definition of cutbacks as compared to road oils, as follows:

A cutback is a combination of two products of controllable characteristics, while a road oil is in most instances a residue of inherent and only slightly controllable properties. Very evidently there are some general advantages accruing to the cutbacks as compared to the road oils, as a result of this situation whatever the use, with compensating benefit to the road oils of a lower manufacturing cost.

With this brief survey of the fundamental nature of these materials, we can proceed to our comparison of them in use. Liquid asphalt is essentially a binder, with some supplementary waterproofing characteristics. We usually think of a bituminous job as being a mat composed of aggregate cemented together by asphaltic material. Earlier mats answered this description but practice today finds it desirable to add to such simple construction priming of the base with liquid asphalt, and similarly a sealing of the finished surface, so that we have liquid asphalts functioning in three different roles; namely, as mat binders, primers, and sealing materials. Evidently comparison between the products is in order in these three different uses.

WE WISH to make this comparison on a logical basis. To do this a definite procedure of analysis seems advisable. We will first consider the functions required of the liquid asphalt or its residue after the job is completed, cured, and in final form. We will then consider the action of the liquid asphalt, or the things that may happen to it, when it is used for the purpose of producing a residue to perform these functions. From this we will be able to set up the requirements of the material that will permit the desired type of construction, give the proper action in the construction and curing period, and end up with a residue that will properly perform the intended function. It will be found that such a rational method of analysis logically indicates the necessary characteristics in the material, and therefore makes the comparison between the various types practically self-explanatory.

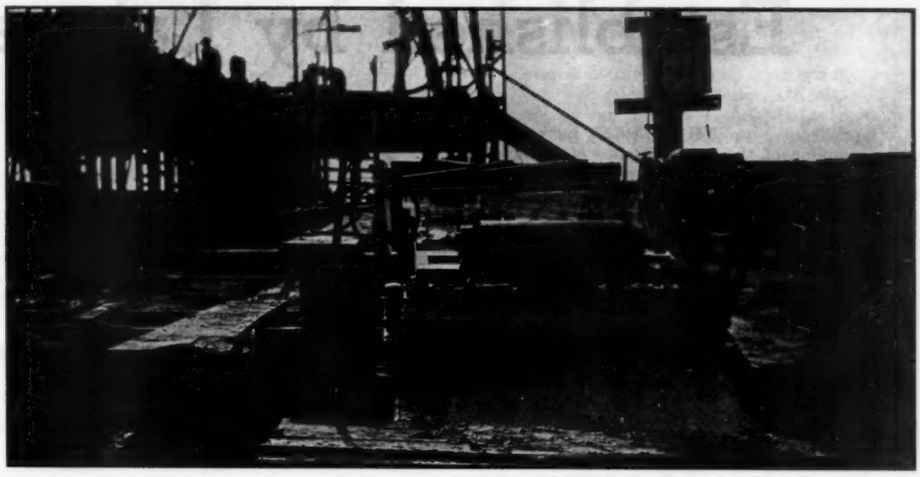
In the construction procedure the base is first primed; the mat is built thereon, and is then sealed. Since, however, the mat is the primary unit it will be considered first, followed by a discussion of the primer and the seal coat. Taking up the primary function of the bituminous material when the mat is in final and completed form, the liquid asphalt or residue therefrom must serve as a cement to bind the aggregate particles together. The resultant mat may be one of two kinds. It may be a flexible surfacing in which the aggregate only transmits the load to the subgrade by direct compression; and the function of the binder is then to merely hold the aggregate particles in place against indirect stresses; or it may form a semiflexible surface in which in addition to the above action there is some beam action or slab effect as a result of the tensile strength of the cement. In either case tensile strength is an essential requirement of the cement, to resist either direct or indirect stresses. This resistance to tensile stresses may occur in one or two ways. It may be developed as a thin film resistance at the points of contact of the aggregate particles, or it may be developed as a result of the semisolid mass of bitumen between the aggregate particles in addition. If merely the thin film effect is depended upon, as must be the case unless a semisolid residue is developed by curing, a very densely graded aggregate must be used to obtain numerous points of contact. This means a carefully controlled grading and a large per cent of fines, or filler. If primary dependence is not placed upon the thin film effect the binder must reach a consistency in the range of ductile flow, which in liquid asphalts means a considerable removal of the nonasphaltic portion to reach the condition where the general characteristic of ductility is encountered.

ASIDE FROM THIS function of exhibiting tensile strength some other functions must be performed. The residue must stay relatively soft or "live" to recement the particles in case of overloading or other damage causing a break. It must resist water action. Finally, it must retain all its characteristics to perform the above functions; and in consequence it must be physically and chemically stable.

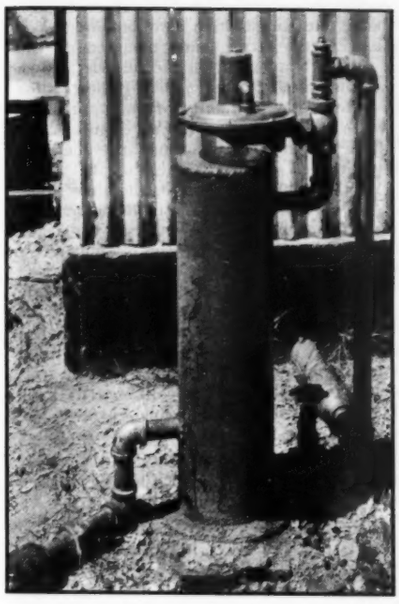
When a mat is constructed of liquid asphalt and aggregate to obtain the above-intended functions they may or may not result, depending upon the action of the material during the construction period and some time after in the compaction or curing period. We will first consider the action of the liquid asphalt when used upon application, or in the construction period. In mechanically mixed mats there is evidently an upper limit of consistency if ready mixing, proper coating of the particles, and shaping of the surface after laying down are to be obtained. If the material gets above this consistency in the mixing period at the temperature of processing a rough surface, balling, or other troubles will occur. In the penetration type mats there is a considerably lower upper limit of consistency for the same type of aggregate to obtain construction results as we are then dependent upon the asphalt working in by itself. On both types there is also a lower limit of consistency which is less frequently recognized. If the material is too thin only a limited amount of it will stay in the mat. The balance will either drain away or be taken away by capillary action in the base and shoulders, so that for any consistency there is a corresponding maximum thickness of asphaltic film that can be held on the particle. Consequently, the lower limit of consistency is set by the lowest permissible film thickness.

NOTE: This article will be continued in an early issue of The Oil and Gas Journal.

OPERATING IDEAS

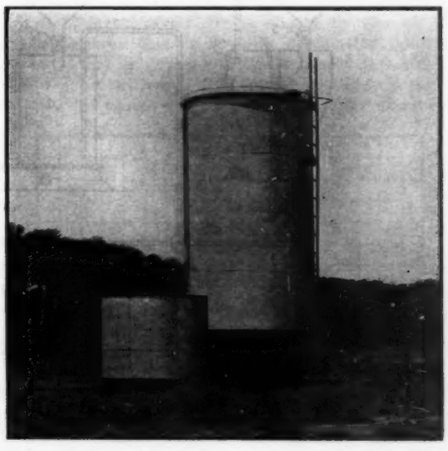


To successfully operate a shaking screen handling rotary mud it is essential the motion be steady and continuous. To accomplish this one firm on the Gulf Coast has installed a 3-horsepower splash proof electric motor operated from current supplied by the regular rig generators. This motor is connected to the screen by V-belt drive. Driven and driving pulleys have been selected to give the desired motion to the vibrating screen and as the current supplied is constant the motor speed does not vary and screening is highly efficient



A device which provides dry fuel at all times for the engine has been devised and is in use in Oklahoma. It consists of a 10-inch pipe, closed at both ends, the pipe acting as a receiving chamber for natural gas fuel for pumping engines. The gas enters the pipe at the bottom and the outlet to the fuel regulator is installed at the top. All excess moisture which might be in the gas settles out at the bottom. The blow-off valve is located at the bottom of the 10-inch vertical pipe and acts as an outlet for moisture and extraneous material that accumulates. This device is usually made from old casing by the welding crew on the property and the cost of the equipment is negligible

Every internal combustion engine needs cooling water and the accompanying cut shows one of them. The water is forced through the engine jacket by a small pump that takes water from the lower part of the tank and it is discharged from the pipe above the window into a larger section of pipe provided with several holes out of which the water runs and is spread and aerated by the wire screen nailed over the wooden frame resting on top of the small wooden tank shown in the center



Handling crude oil in a gathering system is usually done by lease men and at times tanks are filled to more than their capacity. To avoid this waste the tall welded steel tank shown in the accompanying picture was connected to the small steel tank alongside of it so that any overflow would be collected in the small tank. The tall tank is also provided with a floating deck under its steel roof. This combination reduces evaporation

Volatility as Factor in Oil Consumption Established by Laboratory Tests

By

L. L. DAVIS and R. D. BEST

Continental Oil Co.*

THE RECENT increase in the consumption of the lighter grades of motor oil as compared to the heavier has resulted in a greatly increased demand for the lower viscosity or so-called "neutral" base oils for blending purposes. This tendency has upset the balance of production of neutral in relation to bright stocks, and if it continues there is the possibility of a definite shortage of the lower-viscosity oils. The available supply of low-viscosity blending oils is limited by the permissible volatility or distillation range. There is, therefore, an economic need for determining the effect of the volatility on consumption to conserve the supply of neutral oils.

The effect of the grade of neutral oil used on the available supply of an S.A.E. No. 30 blended oil is shown in Table 1. Thus, it is possible to produce 66 per cent of finished 150 viscosity at 100°F. neutral oil from a typical Mid-Continent pressed (dewaxed) paraffin distillate. About 45 per cent of this neutral is required when blended with bright stock to produce an S.A.E. No. 30 motor oil. Therefore, 146 bbl. of the S.A.E. No. 30 oil can be produced from 100 bbls. of original pressed distillate. If, however, the distillate is reduced to a 300 viscosity neutral, only 41 bbls. of S.A.E. No. 30 oil could be produced.

TABLE 1.—EFFECT OF GRADE OF NEUTRAL OIL ON THE AVAILABLE SUPPLY OF S.A.E. No. 30 BLENDED OIL

Viscosity at 100° F. of neutral oil oil used in blend	Yield of neutral oil from pressed distillate, per cent	Percentage of neutral in S.A.E. No. 30 oil	Barrels of S.A.E. No. 30 available from 100 bbl. of pressed distillate
150	66	45	146
200	42	58	74
240	35	61	57
300	28	69	41

Another factor which has made it difficult to draw conclusions from past work is that long-time engine tests are practically impossible to check because of changing mechanical and operating conditions. In long-time tests both the volatility and viscosity of the oil may change widely which would be significantly different between them would be volatility. This possibility solved the problem of making corrections for variables which were unknown in magnitude.

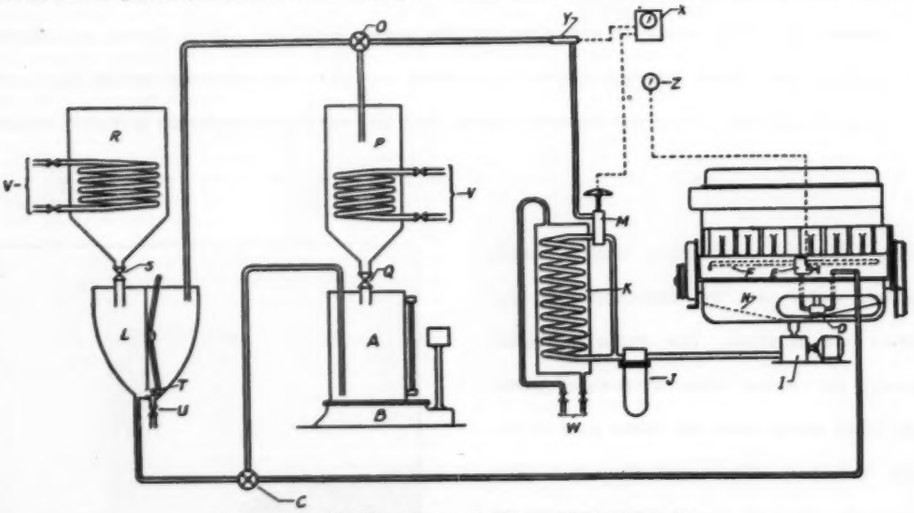


Figure 1.—Oil flow through Chevrolet test-engine

The majority of published work has been based upon the examination of a limited group of oils, usually varying over a wide range of viscosity. The resultant consumption data when plotted against viscosity shows a fairly good relationship. It seems to have been overlooked, however, that in such a series of oils there is also a fair correlation between viscosity and volatility, and therefore if the consumption data are plotted against volatility an equally good relationship may result. As far as the authors know, no work has been published which definitely isolates the effect of variables of viscosity and volatility.

The authors conceived the possibility of isolating the effect of volatility by preparing a series of oils in which that was the only variable. Such a series could be prepared by blending several neutral oils of varying volatility with bright stock from the same crude oil. The finished lubricants would then all be of practically the same viscosity index and would likewise be quite similar in other properties. If the finished lubricants were blended to be equal in viscosity, then the only property during the test, thus making it impossible to correlate the results from different oils. Stewart and Risk in a paper before the Society of Automotive Engineers[1] described a method of making accurate oil-consumption tests in a short time. The apparatus used in our work was essentially that of Stewart and Risk, but differed in some details. It was built around a 1933 Chevrolet engine. A diagram of the arrangement is shown in Figure 1.

The engine was operated with a dry crankcase, the oil being circulated from two outside reservoirs L and A, the latter being mounted on the scale B. Under test operation the oil was drawn from A and delivered to the engine by the regular pump D through the manually operated pressure by-pass valve E. The used oil was circulated by pump I from the crankcase through the thermostatically controlled cooler K back to the reservoir A. As the oil was consumed, the time interval was noted for successive small decrements (usually 0.025 pound) in the weight on the scale. When it was desired to change the oil under test without stopping the engine, the oil circulation was switched to reservoir L and two 6-qt. flushing charges of new oil were circulated to remove the old oil from the engine. Reservoir A was cleaned and seven quarts of the new oil added. All oil charged to the system was brought to the operating temperature in the steam coil heated tanks R and P. After flushing, the engine was switched back to system A to test the new oil.

The engine operating conditions, given below, were selected to match the conditions observed in a fleet of five test cars of the same model, operating during July and August in Oklahoma:

	40 m.p.h.	50 m.p.h.	60 m.p.h.
Water temperature, deg. Fahr.	180	180	180
Oil sump temperature, deg. Fahr.	205	225	235
Gasoline consumption, miles per gal.	18.5	18	15
Load, hp	14 1	22.4	34.8
Oil circulated, gal. per min.	1 67	2.0	2.11

By controlling the oil pressure at the same values as observed in the field and by the induced ventilation of the crankcase, the oil consumption was approximately the same as in the road tests.

The oil-consumption data were plotted against time during each run. After the first few minutes of operation and if the operating conditions were held uniform, the plot was a straight line.

[1] J. P. Stewart and T. H. Risk, "Factors Affecting Oil Consumption," Journal, Soc. Automotive Engrs., October, 1933, p. 42.

TABLE 2.—CHARACTERISTICS OF THE OIL USED

	Oil No. 1	Oil No. 2	Oil No. 3	Oil No. 4	Oil No. 5	Oil No. 6-S	Oil No. 7	Oil No. 8	Oil No. 9	Oil No. 10	Oil No. 11	Oil No. 12	Oil No. 13
Viscosity, Saybolt Universal, sec.:													
Neutral oil used at 100°F.	70	100	150	180	200	225	240	420	555	495	300	(†)	(†)
Blended oil at 130°F	235	235.5	235	235	235	237	235	235	236	235	235	277	210
Blended oil at 210°F	63 9	63 8	62 0	62 6	63.0	63.5	63 0	63.0	62.4	62.8	62.8	63.0	62 4
Percentage of neutral oil used in blend	37	43	44 5	55 7	58	62	60.7	86 1	100	92.3	69	...	..
Flashpoint, deg. Fahr.	380	405	420	430	425	440	435	445	475	430	450	415	445
Firepoint, deg. Fahr.	440	460	475	485	490	505	500	520	555	500	505	480	510
Distillation at 2 mm., deg. Fahr.:													
Initial boiling point	336	359	369	380	390	408	418	444	496	404	410	354	410
2½ per cent	354	375	392	405	411	430	434	475	511	431	426	385	429
5 per cent	370	389	410	422	426	446	447	498	522	451	440	410	443
10 per cent	388	414	430	438	444	462	464	522	536	469	458	442	459
20 per cent	414	434	454	465	468	483	487	552	554	496	482	477	487
30 per cent	428	451	480	495	496	500	505	577	568	522	499	500	505
40 per cent	502	484	506	504	506	520	523	599	579	543	517	519	525
50 per cent	570	545	540	528	530	539	542	620	589	562	536	536	543
60 per cent	608	592	580	562	557	563	564	640	600	580	558	552	564
70 per cent	662	642	630	604	592	598	594	662	608	600	588	570	594
80 per cent	700	690	684	664	646	658	640	685	620	628	632	592	662
90 per cent	(*)	(*)	(*)	(*)	718	(*)	708	(*)	636	672	706	622	(*)
$(T_{90}-T_5)$	330	301	274	242	220	212	193	187	98	177	193	182	219
Initial boiling point + 0.2 $(T_{90}-T_5)$	402	419	424	428	434	450	457	481	516	439	448	390	454

† Special.
* Cracked.

* Presented before thirty-eighth annual meeting of A.S.T.M.

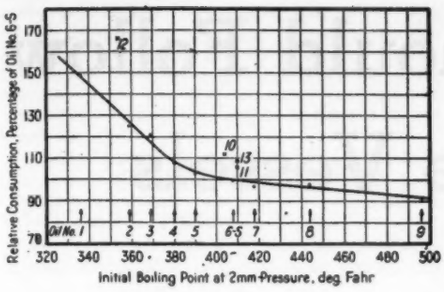


Figure 2.—Relation of consumption to initial boiling point of crankcase oils

The oil consumption, in pounds per hour, for each run was calculated from the slope of the plot. The deviation in the consumption of the reference oil in the first and third runs averaged less than 1 per cent. All tests in which this deviation was greater than 3 per cent were discarded. The consumption of the oil under test was reported as the ratio of its consumption to the average consumption of the reference oil for first and third runs.

The volatility and viscosity characteristics of the test oils are shown in Table 2. The first 11 oils were made from the same crude and have similar viscosity characteristics. In order to obtain a wide range in volatility, an S.A.E. No. 30 grade was used and all 11 oils were blended to a Saybolt Universal viscosity of 235 seconds at 130° F. This gave an average viscosity of 63 seconds at 210°F. The exact viscosities at 130° F. and 210° F. are given in Table 2. The first eight oils are blends of bright stock, having a viscosity of 145 seconds at 210° F., with a series of paraffin pale oils, having viscosities

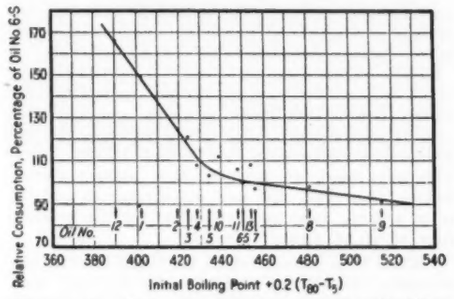


Figure 3.—Oil consumption versus volatility

of from 70 to 430 seconds at 100° F. The ninth oil is an experimental sharply fractionated distillate of the given viscosity.

Oils Nos. 10 and 11 are from the same crude source and have the same viscosity, but are blended with broad cut pale oils to give different overall distillation curves than the first nine oils.

Oils Nos. 12 and 13 are from different crudes and have different viscosity characteristics. They were both blended from commercial S.A.E. Nos. 30 and 40 motor oils to have the same viscosity at 225° F. as oil No. 6-S, that is, 9.2 centistokes or approximately 55½ seconds, Saybolt. Oil No. 12 is of Gulf Coast crude origin, while No. 13 is an eastern paraffinic oil.

The distillation of the test oils under 2-mm. pressure was conducted in the Bureau of Mines type of equipment using a Cenco vacuum controller and a butyl-phthalate gauge. The maximum pressure variation was a ± 0.2 mm. and the temperature was corrected for a variation of 0.1 mm. or more with a large scale Watson and Wirth chart.[2] The distillations of all oils are given in Table 2. A comparison of the initial boiling points and the 2½ to 30 per cent distillation points will show the wide range of volatility covered by the oils tested.

As oil No. 6 was available in quantity and was being used on road test work, it was selected as the standard reference oil and will hereafter be designated as 6-S.

The consumption data obtained by the Chevrolet engine on the above series of oils are given in Table 3. The first column, oil number, refers to the same classification as given in Table 2. The relative consumption of the oil under test is given as the percentage of the average consumption

TABLE 3.—CONSUMPTION TESTS WITH CHEVROLET ENGINE

Oil	Relative consumption, percentage of Oil No. 6-S	Consumption of oil No. 6-S, lb. per hr. Run No. 1	Run No. 3	Deviation between 2 runs on Oil No. 6-S, per cent
Operation equivalent to 50 m.p.h.:				
No. 1	149	0.1005	0.1011	0.6
No. 2	125	0.1006	0.1009	0.3
No. 3	121	0.0995	0.0990	0.3
No. 4	108	0.103	0.103	0
No. 5	103	0.103	0.103	0
No. 6-S	100	0.0923	0.0923	0
No. 7	97	0.103	0.104	1.0
No. 8	97	0.075	0.076	1.4
No. 8'	99	0.076	0.077	1.4
No. 9	91	0.0945	0.094	0.6
No. 10	116	0.104	0.1045	0.4
No. 10'	108	0.096	0.095	1.1
No. 11	106	0.1065	0.1076	1.1
No. 12	168	0.074	0.0735	0.7
No. 12'	164	0.075	0.074	1.4
No. 13	108	0.074	0.0722	2.5
Operation equivalent to 60 m.p.h.:				
No. 1	136	0.266	0.258	3.0
No. 2	119	0.251	0.255	1.6
No. 3	116	0.255	0.254	0.4
No. 4	104	0.255	0.252	1.2
No. 5	105	0.217	0.216	0.5
No. 6-S	100	0.266	0.225	0.5
No. 7	97	0.202	0.203	0.5
No. 9	94	0.199	0.197	1.0
No. 10	116	0.206	0.206	0
No. 10'	111	0.2005	0.199	0.7
No. 11	106	0.209	0.206	1.5
Operation equivalent to 40 m.p.h.:				
No. 1	140	0.0825	0.0832	0.8
No. 2	116	0.083	0.083	0
No. 3	107	0.084	0.083	1.2
No. 4	105	0.084	0.084	0.0
No. 5	104	0.0855	0.084	1.8
No. 6-S	100	0.0818	0.0817	0.1
No. 7	96	0.0825	0.0827	0.2
No. 9	94	0.082	0.0825	0.6
No. 10	112	0.069	0.0697	1.0
No. 11	107	0.083	0.083	0.0

of oil No. 6-S obtained in runs Nos. 1 and 3 for each test. The percentage deviation of oil No. 6-S for the two runs of each test is given. The consumption of oil No. 6-S given in the line for that oil is the average of all tests.

The absolute consumption of oil No. 6-S for all runs is not directly comparable as occasional engine overhauls changed the basic consumption. In the 50 m.p.h. series all runs are directly comparable except for oils Nos. 8, 12 and 13. These latter were run some weeks after all other work was completed and after an engine overhaul. It is interesting to note the accuracy with which oil No. 6-S was checked between the two runs in each test. This indicates that the method for flushing the engine definitely overcomes any contamination through drainage between runs.

The consumption reported may be considered as that resulting from the oil as charged, since there was practically no change in the viscosity or volatility characteristics during the test. A 250 end point straight-run aviation gasoline was used to eliminate serious crankcase dilution, and the test period was so short that there was no increase in viscosity due to oxidation or evaporation. Oil at the end of test showed a viscosity change not greater than 2 seconds at 130° F.

During September it became possible to make a few road runs with a Chevrolet test fleet of four cars. The fleet, freshly overhauled, was operated on oil No. 6-S for a 2,500-mile break-in period. Two calibrating runs of 1,000 miles were then made with oil No. 6-S to determine the difference in consumption between cars. A series of runs was then made comparing oil No. 6-S with the test oils Nos. 1 to 4, inclusive. In each run

TABLE 4.—CHEVROLET FLEET ROAD TESTS

Speed, 50 m.p.h. Water temperature, 180° F. Average oil sump temperature, 245° F.

Oil	Relative consumption, percentage of oil No. 6-S	Average viscosity at end of test, sec., Saybolt Universal at 100° F.
No. 1	146	900
No. 2	134	806
No. 3	143	737
No. 4	131	670
No. 6-S	100	631

of 740 miles two cars were on oil No. 6-S and two on the unknown oil. The actual consumption was corrected for the car differences found in the calibrating run and the relative consumption of the unknown oil in terms of the percentage of consumption of oil No. 6-S was calculated. Table 4 gives the average results of two or more runs on each oil. The tests were over a long enough period to cause a material increase in the viscosity of the crankcase oil due to the evaporation of the more volatile oils. The average viscosity at 100° F. at the end of the runs is given in the same table. These viscosities should be compared with the original viscosity of all oils of about 555 seconds at 100° F. While these tests were confined to fair days, the variation in temperature, winds, etc., made checks difficult.

A study of the data in Table 3 indicates that there is a very definite increase in consumption with increase in volatility. In a crankcase oil

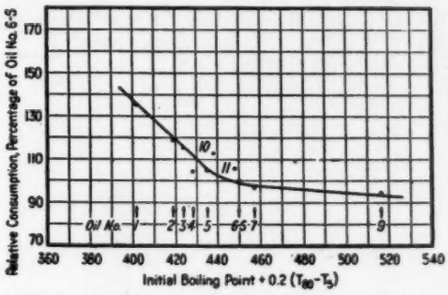


Figure 4.—Oil consumption versus volatility

it is probable that the first portion of the distillation range would have the greatest effect on consumption. The first nine oils, being of a uniform series, should show a reasonable correlation between their initial boiling points and consumption. This relationship is shown in Figure 2 by the dots and heavy line.

The last four oils, not being of the same homologous series, show a definite non-conformity with this initial boiling point versus consumption curve as shown by the X's in Figure 2. Similar graphs comparing the consumption with the 2½, 5 and 10 per cent distillation points show lesser correlation, the higher the distillation point used.

The distillations of oils Nos. 10, 11 and 12 show a less over-all range as compared to those oils in the first series having similar initial boiling points. This characteristic is shown by the difference between the 80 per cent distillation point and the 5 per cent point in Table 2. If this difference is significant, the initial boiling point modified by the over-all distillation range should

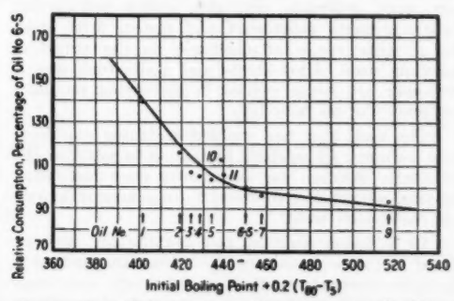


Figure 5.—Oil consumption versus volatility

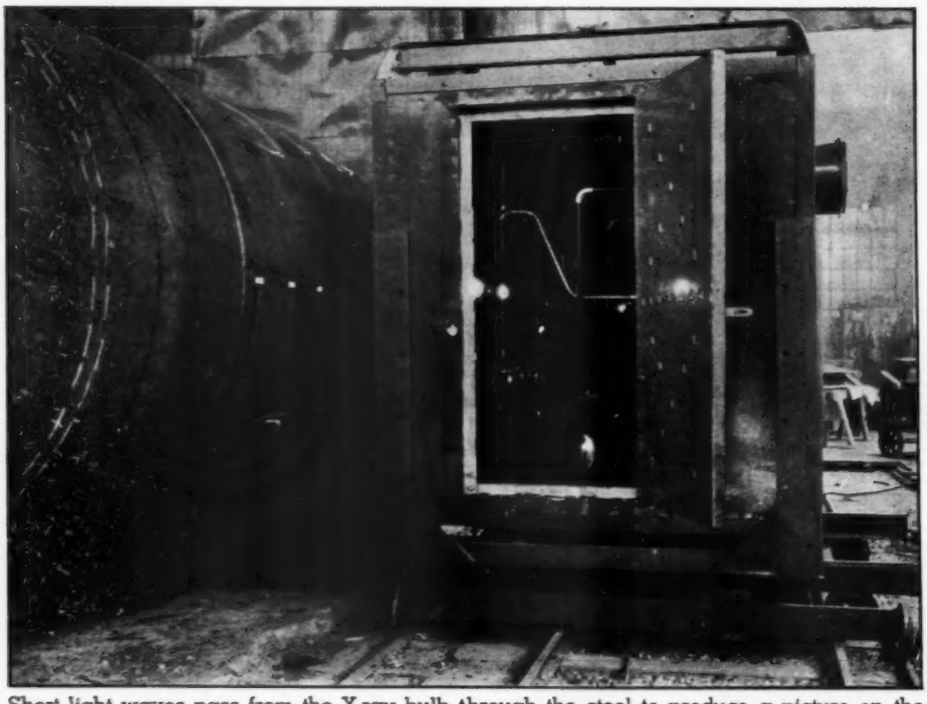
show correlation with the consumption. Figure 3 gives the relationship between consumption and the initial boiling points plus one-fifth of the difference between the 80 and 5 per cent points: Initial boiling point $+0.2\ (T_{80}-T_5)$. This "volatility factor" shows good correlation for all oils except No. 13. There is no apparent variation in the distillation of the latter oil to explain this discrepancy, which is probably due to the error of test or some factor not yet recognized.

It is realized that with only one (No. 12) widely differing oil in the series the suggested volatility factor will probably require modification when additional data are available. The divergence of oil No. 12 may be partially due to viscosity differences, if the viscosity correlating temperature of 225° F. is not correct for the engine in question. A volatility factor using the slope for the first 10 to 30 per cent evaporated rather than the over-all slope may give good correlation.

[2] K. M. Watson and Charles Wirth III, "Routine High-Vacuum Distillation of Oils," Industrial and Engineering Chemistry, Analytical Edition, January 15, 1935, Vol. 7, No. 1, pp. 72-75.

Elaborate Test System Should Follow Fabrication of Pressure Vessels

By T. C. SCHUYLER
Struthers-Wells Co.



Short light waves pass from the X-ray bulb through the steel to produce a picture on the film mounted inside the pressure vessel and a variation in shading denotes weakness

WELDED REFINERY vessels are safe, desirable and give entire satisfaction when properly fabricated and tested. Mild steel, in a wide range of thickness is the principal medium used. Alloy steels and nonferrous metals however are being welded in increasing tonnages to serve the oil industry.

The weld that has enabled designing engineers and refinery technicians to realize in practice the economic demand for equipment ever increasing in size, weight and complexity, is generally known as the fusion weld.

In a fusion weld by the metallic arc process, fluid metal is caused to flow from the end of a metallic electrode to the comparatively cool properly prepared juncture areas through the medium of a suitable current of electrical energy. When this is done, not only does highly superheated metal flow from the electrode to the juncture areas but these areas themselves are at the same time heated locally to the proper fluid condition as receptive to the added metal from the electrode.

Because of the severe service to which refinery equipment is subjected, involving simultaneously high pressure, extremes in temperatures and severe corrosive action, welds in their fabrication must be surrounded by every safe guard.

Experienced manufacturers fully realized the importance of satisfying their clients in respect to the above and were quick to adopt the reliable nondestructive method of testing their welds by the use of the X-ray and other radiographic means.

The relative positions of the films in their cassettes and the X-ray tubes plainly show how the weld, between them is subject to the searching investigation by the emanations from the tubes.

When the films have been exposed and developed by the proper technique, defects equal to 2 per cent of the thickness of the weld are recorded. To insure that the proper technique has been used a scientifically designed metal gauge or penetrameter is placed adjacent to the weld on that surface nearest to the X-ray tube.

This penetrameter in effect is an artificial defect of just 2 per cent of the weld thickness and its visibility on the film is an index that the proper technique has been used.

The determination of minor and major defects upon viewing the films is a matter of checking them by comparison with standardized films which are acceptable as indicating sound welds.

Experienced film viewers can readily detect the few questionable areas that should be investigated and in most cases indicate on their repair orders at just what depth in the weld the trouble will be found. At present, welds 4½ inches thick can be successfully investigated by the X-ray.

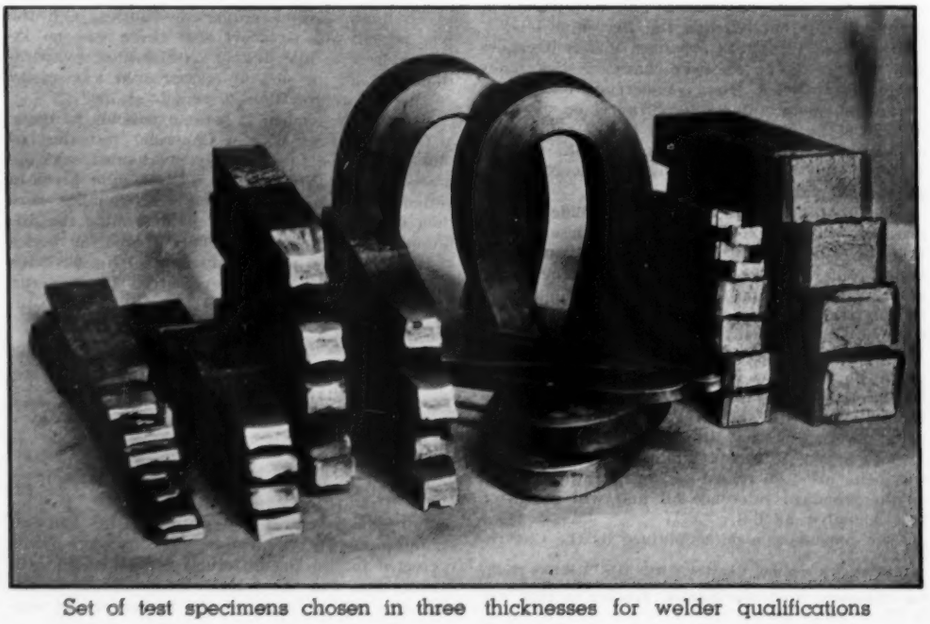
The same applies in checking the weld results when developing welding procedures, welding new alloys and welding together different kinds of metals for economic production in the complicated equipment for special services.

The development and maintenance of a correct welding procedure among the welding operators in a plant is a matter of sound metallurgical management continuously applied. Periodic test of welders must be made by having them weld test plates in a wide range of thickness. Only those successful in passing their tests are qualified to work on important refinery vessels and given individual stamps or symbols by means of which their welds in production are signed at frequent intervals.

Plate material that may show acceptable physical tests not infrequently is the contributor to welds that fail to meet the X-ray requirements and upon physical testing, leave much to be desired in the bend tests and deposited metal tests. The importance of insuring that plate material is free from slag, dirt and other inherent defects is in a large measure responsible for the production of sound welds.

When it is considered in conjunction with the foregoing observation together with the fact that from 90 to 95 per cent of the material of a typical refinery vessel is wrought steel, the importance of every endeavor to improve its quality may be realized.

Refinery vessels of heavy wall thicknesses are for the most part placed in service where the



Set of test specimens chosen in three thicknesses for welder qualifications

effects of corrosion are most marked. They are carefully checked periodically and from such checks the effects of corrosion revealed have been carefully investigated. The result of such investigations has lately brought about promising developments in the use of metals other than steel to combat corrosion in the form of liners and by hot metal spraying.

Fusion welding as described is productive of high temperatures local in application which upon cooling must impose upon the structure, the effects of natural contraction.

The weld upon cooling not only contracts within itself but because of homogeneous fusion, subjects the parent metal or adjacent juncture areas to the same effect. On the other hand the parent metal because of its greater area unaffected by heat, resists the weld zone contraction. Thus internal stresses are present in the structure that cannot very well be engineered out.

Poor quality plate did not permit making good weld on this job

These locked up stresses must be removed by application of heat in a suitable furnace large enough to accommodate the welded vessel as it is ready to be installed.

Stress relieving of a welded vessel not only removes the stresses in the metal occasioned by the various operations of fabrication, but it also has considerable effect upon the different physical properties. When it is considered that the stress relieve is really to "draw" as is done to forgings after quenching, a clearer picture of the reactions taking place is obtained. In fact, a vessel prior to stress relieving may be likened to a forging after quenching in which a vast number of stresses are locked up that must be released before such material is suitable for use. In forgings it is customary to draw back to increase the ductility to the maximum possible consistent with the tensile strength and the temperatures used must be governed by these factors.

In a welded vessel, the major point of consideration in the establishment of temperatures for stress relieving is the material and the design. For these reasons it is rarely customary to exceed 1,200° F. for above this temperature there is danger of deformation or even collapse.

This relatively low temperature does not have a true annealing action on the weld. To exert such an influence it would be necessary to go above the critical point of the material, approximately 1,500° F. However, it does have a distinct softening and equalizing effect not only on the weld metal but also the plate stock adjacent to it.

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PROBLEMS FROM READERS

Edited by T. F. Smiley

Verticality of the Well Hole Is Not Object of Directed Drilling

A good deal is being written about directed drilling and I have been unable to form a very clear idea of what is meant by it. Of course anybody knows that directed drilling, considering just the meaning of the words, could be defined as drilling that is directed or controlled so that the hole follows a certain desired course. But one of the things a driller tries hard to do is to drill a straight hole, and from such references to the subject as I have run across directed drilling not only does not make straight holes, but apparently is not even designed to make straight holes. I would appreciate an explanation of the benefits (for I suppose there must be benefits) of this so-called directed drilling.—N. G. S.

It is quite easy to understand why the purposes of directed drilling are a little confusing in the light of what has been written in recent years about the desirability of vertical well holes. R. E. Allen, assistant oil umpire of California, seems to clarify this point in a paper on "Theory and Practice of Directed Drilling" read before a meeting of the A.I.M.E. in Los Angeles. He says:

"The deliberate drifting of holes is an act so far removed from what has been considered good drilling practice that all of the old questions of correlation, drillability and production difficulties are revived. Only a few years ago, during the boom days of Seminole and Santa Fe Springs, the crooked-hole problem, as it was then called, occupied a primary position among the topics of the day in the fields of California and the Mid-Continent. The net result of all the discussion and study at that time was the conclusion that oil wells should be drilled with as little deviation from the vertical as possible and that crooked holes with elbows and doglegs were to be avoided because of the drilling and producing difficulties encountered therein, but that many nonvertical holes were slanting or angling rather than crooked and were not a serious problem.

"The perfectly vertical hole is probably the scarcest thing in the oil fields and the slightly to severely crooked hole is probably the most common type because hole-straightening efforts frequently result in angular and directional changes and the consequent formation of a dogleg hole.

"The directed hole, if successfully controlled, may have no bends but rather a course gradually deviating farther and farther from the vertical so that when the oil-sand objective is reached it is not uncommon for holes to be 60 per cent from the vertical. One practical application of directed drilling may be, and has been, made in securing greater oil-sand penetration, with its current and ultimate effect on productivity.

"Directed drilling, although still comparatively new in the oil-producing business, is a practice of many years standing in the mining of metals and nonmetals where it is common to drill several radiating holes from one location for the purpose of blocking out ore bodies and mineral deposits. In mineral-survey holes the depths are relatively shallow compared with deep oil wells, but the requirements of direction control and accurate hole surveys are even more exacting than with oil wells.

"Oil wells are not drilled primarily to survey the oil sand, so the only reasons for drilling deviant holes are to save expense or secure more oil production. Just as many other practices have both a proper use and an abuse, so has the directed drilling of oil wells. However, the use that may be made of the practice does not affect the consideration due it as a drilling accomplishment. One use to which directed drilling may be put is that of avoiding the expense of drilling on an inaccessible surface location, such as a submerged or precipitous one, by using a more convenient and accessible location as a drilling site. Sometimes considerable depth of hole may also be saved by drilling from a topographically lower location.

"Another important use of directed drilling is found in offshore drilling in the ocean fields of California and the lake and bay fields of the Gulf Coast and Venezuela. In many such fields the cost of an adequate foundation for the derrick exceeds the cost of drilling the well. In such locations it is possible to drill several holes from one foundation and derrick and by properly directing the holes an area equal to that of six or seven normal locations may be penetrated and drained."

Readers are invited to send questions relating to drilling, producing and transporting operations. These questions will be placed in the hands of persons capable of answering them authoritatively. The names of those writing for information will be considered confidential, initials only being published. This department cannot undertake to answer questions involving patents or intricate formulas or those which properly should be submitted to consulting engineers or geologists.

WHY THEY CALLED IT *Cable*

From the beginning of oil well history the cable has been an essential piece of drilling equipment. Formerly manila cable was used almost exclusively. Now the wire cable has come into general use. There are other uses for cables. For instance, although his day as a circus acrobat is past, a newspaper item says Ivy Baldwin, 70, Eldorado Springs, Colo., keeps in practice by crossing a cable 635 feet long between two rocks 582 feet above the ground, once a week. It usually takes Mr. Baldwin six minutes to take his dizzy stroll, although he has done it in half that time. Once he was caught in a hailstorm when half way across and he clung to the cable more than 30 minutes while the storm raged. The word "cable" is taken from the French and its origin is somewhat obscure.

Why Slow Production of Oil Fields Results in Higher Recovery

Just what constitutes "reservoir pressure" as this term is used in referring to the production of oil? Is it simply another way of designating the gas pressure that causes wells to flow? I wish you would explain to me the reason why slow production of an oil field is supposed to result in greater total recovery than fast production does.—S. E. R.

Engineers agree that the ultimate recovery from an oil pool depends principally upon the energy available to carry oil to the wells and the efficiency with which that energy is utilized. Oil does not move to the wells unless driven by compressed gas present in the oil, by water lying under the oil and pressing upward upon it or by both these forces, which constitute "reservoir pressure."

If gas and oil are allowed to flow in large volume and without restriction, water may be drawn into the well in such a way as to "cone" at the bottom of the well and shut off the production of oil. In some soft-sand areas where wells have been allowed to flow open and too freely, the sand has been washed away between layers of shale, with the result that these shale beds have fallen down across the face of the sand and thus shut off further production of oil. If gas bypasses the oil on its way to the well and escapes, the oil is left in the sand without any natural means of movement to the well.

Discussing the effect of curtailment on ultimate oil recovery, T. V. Moore, of the Humble Oil & Refining Co., said in a paper before the American Petroleum Institute:

"There can be no doubt that maintenance of reservoir pressure conserves the energy necessary to produce oil and at the same time causes the oil to retain desirable physical characteristics, such as low viscosity and low surface tension, so that less of this energy is required to produce each barrel of oil. This inevitably increases ultimate recovery; hence, maintenance of reservoir pressure must be one of the most important steps to be taken in securing maximum yield of oil economically. If restriction of production results in maintenance of pressure, it must increase the recovery of oil.

"Fields in which the water underlying the oil can furnish a substantial proportion of the energy required to produce the oil are said to be under water drive, and most of the petroleum reserve in the United States is found in such fields. In fields of this type the extent to which the reservoir pressure is maintained depends almost entirely on the rate of production. At low rates of production the pressure may remain practically constant at a high value, while at high rates the pressure declines at nearly the same rate as if there were no energy whatsoever supplied by the water. This is due to the frictional resistance to the movement of water through the reservoir rock.

"Data supporting this proposition are available on many pools, but the East Texas Field offers the most striking example of how water can maintain reservoir pressure. In this field, a relatively small change in the rate of production causes, almost immediately, a corresponding change in the reservoir pressure. As a result many wells which have to be pumped when the field is producing at high rates will flow naturally when the production is restricted. The Thompsons Field in the Texas Gulf Coast is another excellent example of maintenance of pressure by water drive. After producing 13,000,000 bbls. of oil, the reservoir pressure in this field is more than 98 per cent of its original value, and over a two-year period has been increasing rather than decreasing."

West and North Texas

RECORD IN KEYSTONE FIELD AT KERMIT, WINKLER COUNTY

By
L. E. BREDBERG

FORT WORTH, Tex., July 29.—Three wells completed on a wildcat block and one making oil within two weeks is another record for the Keystone area just opened by Gulf Production Co. and Sid Richardson, 4½ miles northeast of Kermit in Winkler County. Gulf company is completing its No. 2, which extends the area 2½ miles southeast proving 2,000 acres, and is drilling on seven other locations. If all are producers there will be around 4,000 acres proved.

Gulf Production Co.'s No. 1 Keystone, discovery well, NW ¼ of Section 10, Block B-3, was deepened from 3,483 feet to 3,503 feet and picked up a good increase in oil. It flowed 22½ bbls. in one hour and made 56 bbls. in two and one-half hours. Gas gauges 13,900,000 feet. It is shut in for storage.

Sid Richardson's No. 1 Walton, in Section 1, Block B-3, about one-half mile northwest, was deepened to 3,602 feet and is flowing 16½ bbls. of fluid per hour, 40 per cent mud and 5 per cent water. The remainder is oil. Total depth of this well in great part responsible for Gulf staking nine locations on its wildcat Keystone block, was 3,524 feet. Richardson has made location for No. 2 Walton, a north offset to Gulf's discovery, 2,310 feet from the west and 150 feet from the south lines of Section 1, Block B-3.

Gulf Production Co.'s No. 2 Keystone Cattle Co., NW cor. of Section 17, Block B-2, formerly appeared as a dry hole when bottomed at 3,702 feet, 219 feet deeper than the discovery before it was drilled 20 feet deeper. But No. 2 has come through as a producer, extending the area 2½ miles southeast. It made 199 bbls. of oil the last 24 hours while cleaning out following a shot of 500 quarts.

The other tests of Gulf Production Co. on its block follow: No. 5, in Section 6, Block B-2, three-quarters of a mile southeast of the discovery, is making 100 bbls. of fluid per day, 20 per cent drilling fluid. It is the fourth test to show for a well on the block. Total depth is 3,500 feet. Seven-inch casing is being run at 3,150 feet. It is also making 9,240,000 feet of gas per day, and is due to make the next well, the fourth, to be completed. No. 3 is down only 3,363 feet, where standard tools are being rigged up and No. 4 is down 3,487 feet, where it is coring. Nos. 7, 8 and 9, the last three locations to be drilled, are down 2,135, 2,498 and 2,200 feet, respectively.

Tight lime is no doubt responsible for the small wells, and No. 2 Keystone would probably have not made a well if shooting had not been resorted to. It was low structurally, which makes the eastern limits appear near the well. Acid treatment of No. 1 Keystone, discovery well, helped to increase its production, and it is believed deeper drilling in the wells will increase them, more prolific production being expected below where the wells are now producing.

Jones County

The Jones County discovery, about 3 or 4 miles northwest of Lueders, by R. B. Farris and Leland Fikes on the J. W. Jennings farm, in Section 207, B.B.B.&C. Survey, appears one of the best wells in the northern part of the county and the most important discovery in a long time. Total depth was 2,040 feet but the operators tamped rock 20 feet up from bottom preparatory to setting 5⅞-inch casing at 2,020 feet. Before this was done the well flowed approximately 250 bbls. by heads within 24 hours. It is believed good for at least twice this much and has caused one of the largest plays the county has seen in a long time. S. A. Guiberson, Jr., and T. D. Humphrey jointly purchased 3,400 acres around the well and Magnolia Petroleum Co. also leased some acreage nearby. Claude Dally, consulting geologist of Fort Worth, worked the geology and made location for the discovery well.

Tentative location has been made for a second test by the discovery operators, 150 feet south and west of the discovery. Three more wells are to be drilled on the Jennings farm and the city of Stamford. R. L. Penick and W. G. Swenson will each have a test drilled on property held by them.

Panhandle Refining Co., which has a small refinery at Lueders, has purchased 450 bbls. of the oil produced and 500 bbls. are in storage. A 1,000-bbl. storage tank is being moved to the well preparatory to giving it a thorough testing.

So far pools in this part of the county have been limited to small areas, and this one may prove likewise, but there is plenty of room for expansion and independents buying leases will soon determine whether a fair sized pool is to be found. Elevation is 1,580 feet on the discovery.

Ordovician Test

John I. Moore, Loffland Brothers and others' No. 1 L. S. McDowell, in Section 22, Block 34, Township 2s, T.&P. Survey, Glasscock County, is drilling below 10,000 feet in brown lime and shale. It encountered several good showings of deep oil and appeared as possibly another Ordovician discovery. It was shut down at 9,046 feet for about three months and when tools were run in the hole it made a 50-bbl. head of oil accumulated during the shut down.

Halley Area—Winkler County

States Oil Co.'s No. 1 Tobe Morton, Section 11, Block B-12, P.S.L. Survey, a little over 3 miles northwest of the Halley discovery in Winkler County, and southeast of the Hendricks Field, logged the lime pay at 2,888-92 feet this week then struck 500 feet of salt water in three hours from 2,945-48 feet. It is plugging back to make a test, with the hole nearly full of oil. It is apparently sure of making some kind of a well and if so will help build up the belief that the Halley and Howe areas, which parallel the Hendricks Field to the east, will be connected by production. The Brown and Altman producing area, about 1 mile south of Kermit, is on this trend, and is about 4 miles north and a little east of the Tobe Morton test. There are several producers on the Brown and Altman ranch.

Sun Oil Co.'s No. 1 Halley, in Section 24, Block B-21, between the Morton test and the Halley discovery, is rigging up pumping unit after plugging back to 2,732 feet. It will make a small pumper, an extension to the Halley area about 2 miles northwest. Total depth was 3,173 feet. The company is preparing to drill another test.

Goldsmith Area—Ector County

Little more can be said at this time in regard to Phillips Petroleum Co. and Pure Oil Co.'s test in Section 14, Block 44, Township 1s, T.&P. Survey, about 1½ miles southeast of the Gulf-Goldsmith discovery, Ector County, but it will probably be completed in a few days, proving an extension. Tubing has been run to 3,980 feet, and total depth is 4,171 feet. It previously swabbed at the rate of 10 bbls. of oil per hour. The same companies' No. 2 Cowden, in Section 23, Block 44, nearly 1½ miles farther south, is drilling at 4,010 feet in lime, under pressure. It too will make an important extension if a producer. Gulf Production Co. has staked a west offset to No. 1 Cowden, in Section 15, Block 44.

Cowden Area—Ector County

The next most important test in the county is Sun Oil Co. and Atlantic Oil Producing Co.'s No. 1-B Holt, in Section 5, Block 43, Township 1n, T.&P. Survey, about 2 miles northwest of production in the Cowden Field and showing some oil from 4,047 to 4,082 feet to which point it drilled with the hole loaded. It is bailing water to test. Seven-inch casing was set at 4,047 feet.

Crane County Wildcat

Gulf Production Co.'s No. 1 McKnight, wildcat, Section 9, Block B-21, 4 miles north of the lone producer on the Tubbs ranch, drilled by Gulf Production Co. and Cranfill Brothers, is to be placed on the pump. Total depth is 3,713 feet. It has been swabbing and during the last 18 hours made 40 bbls. of oil and 60 bbls. of water. It is sure of making a small pumper, extending this area to the north.

Andrews County

Sun Oil Co., second company to enter the Means area besides Humble Oil & Refining Co., which discovered the pool, has staked location in Section 8, Block A-35, about 1 mile west of the center of the proven area in which there has been no drilling except by Humble and a recent test started by Shell Petroleum Corp.

Wildcat Locations

Two wildcat locations were reported, but several other locations were proposed and ready to be made in areas just discovered. Grisham-Hunter Corp. staked a wildcat on Texas Pacific Land Trust lands in Section 27, Block 57, Township 2, T.&P. Survey, in northwestern Reeves County. It is to drill for production in the Delaware from which production is obtained southeast in the Wheat Pool, Loving County.

Hart Oil Corp. of Fort Worth is drilling on its No. 1-A Edwards, in Section 29, Block 1, L.&V.S. Survey. Same company abandoned No. 1 Edwards, in the same section, this week at a total depth of 4,817 feet. Elevation is 3,112 feet.

Garza County Completions

M. L. Richards completed No. 1 J. R. Sullivan wildcat discovery south of Post in Garza County this week, opening a new pool. It made an initial production of 25 bbls. of oil and 7 bbls. of water per day on the pump after treating with 2,000 gallons of acid. Pay was topped at 2,815 feet, was drilled to a total depth of 2,974 feet, but plugged back to 2,936 feet in an effort to shut off water.

Pecos County Discovery

The shallow White and Baker discovery well of Gulf Production Co. in Section 3, Block 207, T.C.R.R. Survey, brought in last December at a total depth of 1,826 feet for a 27½-bbl. well, but later deepened to 1,840 feet without much success, has been deepened a second time, to 1,926 feet, resulting in a good increase in oil. It is pumping 65 bbls. daily from its new depth. The first pay was topped at 1,824 feet. This well is 9 miles west of the Yates Field, and is the only producer in the area although seven other tests have been drilled, all dry but a 11,000,000-foot gasser.

Ector Abandonment

Empire Gas & Fuel Co.'s No. 1 Cummins, in Section 10, Block 45, Township 1n, T.&P. Survey, northwest Ector County, has been abandoned at a total depth of 4,557 feet. It is about 1 mile southeast of the small Davidson-Cummins discovery and in the same section. It flowed by heads when tools were pulled from

the hole and appeared as a small producer, but the company considered it useless to try and produce it.

Scurry Wildcat Abandonment

Magnolia Petroleum Co. has abandoned its wildcat on the Mooar ranch in Section 342, Block 97, H.&T.C. Survey, Scurry County, at a total depth of 2,980 feet. Elevation is 2,516 feet. This test is on a fair sized block held for some time.

Allowable Increased

The daily allowable for the Howard-Glasscock County pools has been increased to 20,000 bbls. per day to help operators in the Iatan Pool on the eastern side of Howard County and also as an aid to the Cosden Oil Co. which needed more oil to fill the requirements of its Big Spring refinery. It is understood the Col-Tex Refining Co., which is taking oil from the Iatan Pool, was also in need of more oil for its plant at Colorado.

Jeff Davis Wildcat

John Downing and F. B. Woods have assembled a block of 15,000 acres in Jeff Davis and Presidio Counties, and propose drilling a 6,000-foot test in Section 293, Block 4, H.&T.C. Survey.

WICHITA FALLS COMPLETIONS

Archer County

J. H. Coker and others' No. 3 J. White, total depth 733 feet, dry and abandoned. F. P. Cullum's No. 34 Falls (Ellis lease), top pay 1,141 feet, total depth 1,157 feet, initial production 80 bbls. per day. Deep Oil Development Co. and Lindsey's No. 3, Lease 4, L. F. Wilson, top pay 1,414 feet, total depth 1,425 feet, plugged back to 1,419 feet, initial production 10 bbls. per day. S. H. Fagadau and others' No. 1 J. S. Bridwell, total depth 1,034 feet, dry and abandoned. E. Garson and M. Seigel's No. 1 W. D. Pace, total depth 2,855 feet, dry and abandoned. Hardesty-Elliott Oil Corp. and others' No. 20 W. T. Richardson, total depth 1,469 feet, dry and abandoned; No. 21 W. T. Richardson, total depth 1,473 feet, dry and abandoned. Huggins Oil Co.'s No. 8 J. R. Parkey, total depth 1,722 feet, dry and abandoned. Perkins and Cullum's No. 190 Falls, top pay 1,128 feet, total depth 1,157 feet, initial production estimated 100 bbls. per day. Petroleum Producers' No. 4 F. Brazina and others, total depth 1,513 feet, dry and abandoned. Texas Co.'s No. 1 M. E. Durham, total depth 1,577 feet, dry and abandoned; No. 6 E. H. and J. E. Morrison, top pay 1,326 feet, total depth 1,332 feet, initial production 81 bbls. per day.

Baylor County

Consolidated and Petroleum Producers' No. 15-D W. H. Portwood, total depth 1,369 feet, dry and abandoned; No. 16-D W. H. Portwood, top pay 1,390 feet, total depth 1,394 feet, initial production 150 bbls. daily; No. 17-D W. H. Portwood, total depth 1,361 feet, dry and abandoned. Ray and Staniforth's No. 2-C W. H. Portwood, top pay 1,364 feet, total depth 1,369 feet, initial production 700 bbls. per day flowing. D. G. Wilson and others' No. 1 J. A. Young, total depth 1,468 feet, dry and abandoned.

Clay County

R. J. Brown and others' No. 1 Sidney Webb, total depth 1,500 feet, dry and abandoned. Midwest and Gulf's No. 1 F. H. Gohlke, total depth 335 feet, dry and abandoned; No. 2 F. H. Gohlke, top pay 272 feet, total depth 279 feet, initial production 2 bbls. per day. Ida Volk Oil Co.'s No. 1 E. H. McCray, total depth 910 feet, dry and abandoned.

Cooke County

D. H. & C. Oil Co.'s No. 1 C. M. Martin, top pay 1,119 feet, total depth 1,126 feet, initial production 25 bbls. oil and 12 bbls. water per day. Harper and Knappenberger's No. 3 Nat. Piott, top pay 697 feet, total depth 727 feet, initial production 96 bbls. per day. McElreath and Suggett's No. 1 J. W. Mount, total depth 1,805 feet, dry and abandoned. F. W. Merrick, Inc.'s No. 4 G. A. Stelzer, top pay 787 feet, total depth 822 feet, initial production 15 bbls. per day; No. 1-B G. A. Stelzer, top pay 849 feet, total depth 856 feet, initial production 100 bbls. per day. Petroleum Producers' No. 9 Andress Brothers, top pay 1,375 feet, total depth 1,385 feet, initial production 35 bbls. per day. Shell Petroleum Corp.'s No. 1 J. Muerer, top pay 750 feet, total depth 773 feet, initial production 10 bbls. per day. Texas Co.'s No. 2 Nat. Piott, top pay 682 feet, total depth 695 feet, initial production 159 bbls. per day.

Jack County

A. B. Bissey's No. 1 Bloodworth, top pay 292 feet, total depth 296 feet, initial production 8 bbls. per day; No. 1 H. L. Branum estate, total depth 297 feet, dry and abandoned; No. 1 W. R. Durham, total depth 340 feet, dry and abandoned; No. 1 Dora Horn, top pay 289 feet, total depth 295 feet, initial production 5 bbls. per day; No. 1 Georgia Lewis, top pay 291 feet, total depth 302 feet, initial production 4½ bbls. per day. Buttram Petroleum Co.'s No. 13 Jones estate, top pay 2,270 feet, total depth 2,276 feet, initial production 55 bbls. per day. M. Ellis and others' No. 1 Ellis and Dubose, total depth 560 feet, dry and abandoned. Smith and others' No. 1 L. W. Scott, total depth 800 feet, dry and abandoned.

Montague County

C. W. Alcorn and others' No. 1 J. G. Howard (old well deepened—old total depth 2,500 feet), total depth 2,684 feet, dry and abandoned. Bridwell Oil Co.'s No. 5 J. H. Brown and others, top pay 1,489 feet, total depth 1,495 feet, initial production 12 bbls. per day. G. M. Richardson and others' No. 1 S. E. Howard, total depth 2,469 feet, dry and abandoned. J. S. Woods and J. O. Cobb's No. 1 Mrs. R. L. Gaston, total depth 2,003 feet, dry and abandoned.

Wilbarger County

McAlester Fuel Co.'s No. 9-T Waggoner estate, top pay 1,864 feet, total depth 1,876 feet, initial production 30 bbls. per day. Morrison and Pettit's No. 1-A R. L. Castleberry, total depth 835 feet, dry and abandoned. Riner and Massie's No. 15-A Waggoner estate, top pay 1,867 feet, total depth 1,875 feet, initial production 50 bbls. per day. Waggoner and Klop's No. 5 Waggoner estate, top pay 1,169 feet, total depth 1,173 feet, initial production 25 bbls. per day.

Wichita County

E. G. Boardman and others' No. 1 J. L. Jackson, top pay 700 feet, total depth 703 feet, initial production 41 bbls. per day. R. R. Clark and others' No. 37-B Bickley estate (old well deepened—old total depth 1,810 feet), total depth 2,074 feet, dry and abandoned. Kemrow and Bailey's No. 54 S. B. Burnett, total depth 1,070 feet, dry and abandoned. W. S. Langford and others' No. 3 George L. Dobie, top pay 359 feet, total depth 374 feet, initial production 6 bbls. per day. George Proctor' No. 19 W. B. Honaker, top pay 1,332 feet, total depth 1,340½ feet, initial production 19 bbls. per day. Texas Co.'s No. 69 W. B. Honaker, top pay 1,047 feet, total depth 1,063 feet, initial production 46 bbls. per day.

Young County

Fresno Oil Co.'s No. 6 J. M. Kirkland, total depth 709 feet, dry and abandoned. Christie Brothers' No. 1 William Atwood, total depth 3,210 feet, dry and abandoned. S. D. Glover's No. 19 C. W. Johnson, top pay 518 feet, total depth 540 feet, initial production 5 bbls. per day. L. A. Long and others' No. 2 A. W. Roark, top pay 2,734 feet, total depth 2,742 feet, initial production 7,000,000 feet of gas per day. Shappell Oil Co.'s No. 1 W. T. Swink, total depth 1,304 feet, dry and abandoned. Texas Co.'s No. 10-B Jeffery estate, top pay 754 feet, total depth 757½ feet, initial production 20 bbls. per day.

WEST TEXAS COMPLETIONS

Andrews County

Humble Oil & Refining Co.'s No. 4 R. M. Means, top pay 4,500 feet, total depth 4,520 feet, treated with 5,000 gallons of acid, initial production 1,382 bbls. per day flowing.

Ector County

W. A. Black & Sons' No. 4 W. E. Connell, top pay 3,585 feet, total depth 3,630 feet, shot with 360 quarts from 3,455-3,600 feet, initial production 540 bbls. per day flowing through casing. Empire Gas & Fuel Co.'s No. 1 H. E. Cummins, total depth 4,557 feet, plugged and abandoned. Landreth Production Co.'s No. 1-A Clarence Scharbauer, top pay 4,137 feet, total depth 4,380 feet, plugged back to 4,180 feet, shot with 250 quarts from 4,054-4,172 feet, initial production 175 bbls. in 16 hours flowing through casing. Stanolind Oil & Gas Co.'s No. 19 J. M. Cowden, top pay 4,225 feet, total depth 4,271 feet, shot with 200 quarts from 4,220-4,271 feet, initial production 995 bbls. per day flowing through casing.

Garza County

M. L. Richards' No. 1 J. R. Sullivan, top pay 2,815 feet, total depth 2,974 feet, plugged back to 2,936 feet, treated with 2,000 gallons acid, initial production 25 bbls. oil and 7 bbls. water per day pumping.

Lynn County

Hart Oil Co.'s No. 1 C. O. Edwards, total depth 4,817 feet, junked and abandoned. Elevation 3,112 feet.

Pecos County

Cardinal Oil Co.'s No. 1 Cornell, trustee, top pay 473 feet, total depth 485 feet, initial production 273½ bbls. per day pumping; No. 2 Cornell, trustee, top pay 470 feet, total depth 492 feet, initial production 274 bbls. per day pumping.

Ward County

Eastland Oil Co.'s No. 1 C. D. Mason, top pay 2,340 feet, total depth 2,551 feet, shot with 350 quarts from 2,300-2,547 feet, initial production 350 bbls. per day flowing through casing. Ferrell & Co.'s No. 7 Pure-Bennett, top pay 2,270 feet, total depth 2,539 feet, initial production 1,260 bbls. per day flowing through tubing, shot with 310 quarts from 2,270-2,539 feet. Magnolia Petroleum Co.'s No. 2 Sealey Estate, total depth 3,053 feet, plugged and abandoned. Simms Oil Co.'s No. 2 W. D. Johnson, total depth 3,063 feet, plugged and abandoned.

Scurry County

Magnolia Petroleum Co.'s No. 1 Moaer, total depth 2,980 feet, dry and abandoned.

Winkler County

Magnolia Petroleum Co.'s No. 8 J. B. Walton, top pay 2,812 feet, total depth 2,931 feet, shot with 95 quarts from 2,812-2,922 feet, initial production 435 bbls. per day flowing through tubing. Mid-Continent Petroleum Corp.'s No. 2 J. F. Howe, top pay 2,800 feet, total depth 3,020 feet, initial production 240 bbls. per day flowing through tubing.

PANHANDLE COMPLETIONS

Carson County

Holmes Brothers' No. 4 Quinn, top pay 2,995 feet, total depth 3,048 feet, shot 330 quarts from 2,990-3,048 feet, initial production 516 bbls., pumping.

Gray County

Champlin Oil & Refining Co.'s No. 9 McLaughlin, top pay 3,025 feet, total depth 3,050 feet, initial production 237 bbls. per day, pumping. Danciger Oil & Refining Co.'s No. 4-B Wright, top pay 2,525 feet, total depth 2,880 feet, initial production 2,977 bbls.

Gulf Production Co.'s No. 8-A Worley, top pay 2,873 feet, total depth 2,983 feet, initial production 353 bbls. oil and 79 bbls. water, pumping. Humble Oil & Refining Co.'s No. 6 Merten, top pay 3,193 feet, total depth 3,232 feet, initial production 25 bbls. oil and little water. Kewanee Oil & Gas Co.'s No. 2-C Morse, top pay 2,738 feet, total depth 2,790 feet, shot 400 quarts from 2,670-2,790 feet, initial production 140 bbls. per day, pumping. King Royalty Co.'s No. 3 Volmert, top pay 3,205 feet, total depth 3,260 feet, shot 330 quarts from 3,185-3,255 feet, initial production 349 bbls. per day, pumping.

Shell Petroleum Corp.'s No. 4 Finley, top pay 3,000 feet, total depth 3,049 feet, shot 200 quarts from 2,998-3,049 feet, initial production 357 bbls. per day, pumping. Naipa Oil Co.'s No. 1 Leopold, top pay 3,244 feet, total depth 3,290 feet, shot 300 quarts from 3,235-90 feet, initial production 373 bbls. per day, pumping. The Texas Co.'s No. 4 Thut, dry and abandoned 3,260 feet, elevation 2,935 feet.

Hutchinson County

Stanolind Oil & Gas Co.'s No. 6 Moore-Langdon, top pay 3,008 feet, total depth 3,100 feet, shot 480 quarts from 2,995-3,100 feet. Initial production 89 bbls. per day, pumping. Stekoll Oil Producing Co.'s No. 9-G Whittenburg, top pay 3,010 feet, total depth 3,026 feet, initial production 313 bbls. per day, pumping.

Moore County

Shamrock Oil & Gas Co.'s No. 2 Robertson, top pay 3,384 feet, total depth 3,410 feet, shot 120 quarts from 3,385-3,410 feet, initial production 133 bbls. per day on gas lift. Champlin Oil & Rfg. Co.'s No. 6 Edes, top pay 2,405 feet, total depth 2,572 feet, initial production 93 bbls. per day. Skelly Oil Co.'s No. 2 Belew, top pay 2,426 feet, total depth 2,539 feet, initial production 320 bbls. daily.

East and East Central Texas

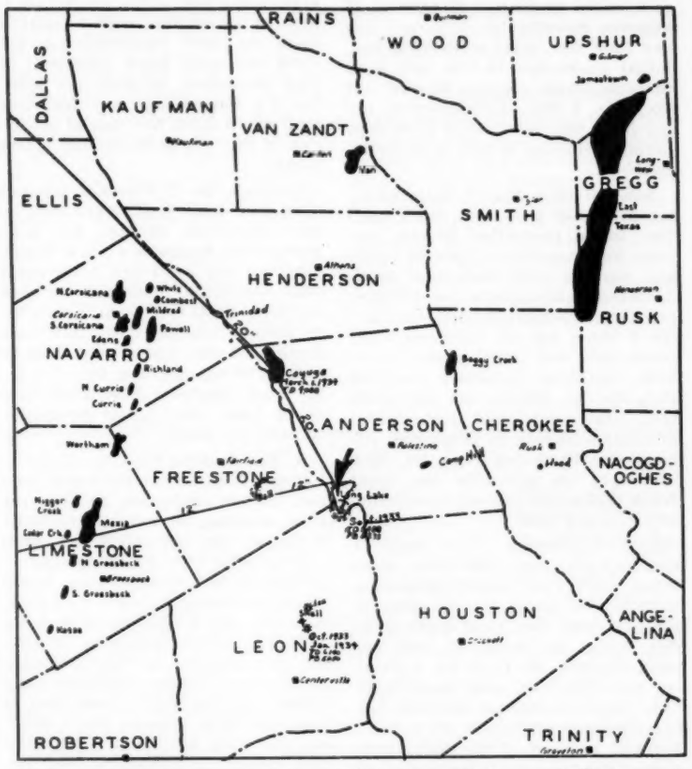
TRINITY SAND TEST HOLDING ATTENTION IN CAYUGA FIELD

By L. E. BREDBERG

DALLAS, Tex., July 29.—The Trinity sand test of the Tide Water Oil Co. and Texas Seaboard Oil Co. in the Cayuga Field, northwest Anderson County, is commanding still more attention as the companies set a string of special 7-inch O.D. casing between 7,750 and 8,000 feet. Elaborate preparations and precautions have been taken to prevent blowing out, and 10 tons of ice were hauled to lower the temperature at the bottom of the hole when pouring cement. Approximately 700 sacks of cement were expected to be used. The hole is open below 4,594 feet, where 9⅝-inch casing was set. The companies have been drilling an 8¾-inch hole below that point.

A large amount of gas formation has been drilled in the test, which is below 8,900 feet. Tide Water Oil Co. has been fortifying itself with acreage, having favorable structural conditions. The test is on the Mrs. N. N. Wills 832-acre tract in the S. Edmondson Survey.

The other Anderson County test being drilled by Tide Water Oil Co. is on the Valentine farm, in the John Little Survey, 7 miles north of Palestine, cored from 5,177-84 feet and recovered 2 feet of hard gray sandy shale and 3 feet of white ashy sand having a salty taste. It also cored from 5,184-92 feet and from 5,192-5,208 feet, showing no oil or gas.



Large potential gas-producing fields, Long Lake and Cayuga, in Anderson County, and two major gas lines, Lone Star Gas Co.

Rusk Pool—Cherokee County

Shell Petroleum Corp.'s No. 1 New Birmingham Development Co., in the Levi Jordan Survey, southeast of the nearest producer in the Rusk Pool, Cherokee County, is down 5,225 feet drilling in brown shale with no showings of oil or gas. The nearest producer, Wood and others' No. 3 New Birmingham Development Co., with an elevation of 478 feet, topped the Woodbine sand at 5,175 feet and was completed 4 feet in the sand. The Shell test should pick up the sand within the next few feet. It has already picked up some salt water sand.

Wildcat Abandonments

There were four wildcat failures listed this week. Neff and others' No. 1 Small, in the I. Greeson Survey, about 4 miles north of the northwest extension to Cayuga, but in Henderson County, was given up as dry at a total depth of 4,054 feet. Elevation is 284 feet. It topped the Woodbine at 4,024 feet and showed salt water at 4,054 feet.

E. M. Thomason & Co.'s No. 1 C. Morgan, in the William Haggard Survey, 1 mile southwest of a dry hole on the Dobbin farm, topped the Woodbine at 2,062-70 feet and was abandoned at a total depth of 2,087 feet. Elevation is 451 feet. It is 3 miles northwest of Corsicana, in Navarro County.

Atlati Royalty Co.'s No. 1 Goldsmith, in the W. W. Lanier Survey, about 3½ miles northwest of Quitman, in Wood County, has been abandoned at a total depth of 5,040 feet. It topped the Woodbine at 4,488 feet.

Limestone County also got a dry hole this week in Schweisinger and others' No. 1 fee, A. Vincent Survey, 3 miles southeast of Mount Calm. Total depth was 1,274 feet. It topped the Austin chalk at 727-980 feet and the Woodbine sand at 1,270 feet.

Van Field

Humble Oil & Refining Co.'s No. 1 J. R. Oliver, in the William Daniel Survey, about 1,000 feet east of the nearest producer in the Van Field, overstepped what was considered the edge of the field and extended production when it made an average of 60 bbls. of oil per hour from sand logged at 2,838-2,942 feet. A south offset has been started by Pure Oil Co. and a number of other producers are expected to be completed east of the northern part of the Van unit.

Wildcat Prospecting

A test is to be drilled 6 miles south of Homer in Angelina County if sufficient acreage can be assembled. R. G. Lawton and others are interested.

Breeding Brothers of Hillsboro are assembling a 6,500-acre block about 8 miles west of Hillsboro, centering in the J. S. Hobley, J. Sherwood and adjacent surveys. A 2,000-foot test is to be drilled on the block.

John Nesbit is assembling a block west of the above block and along the Brazos River running south to Whitney. It centers in the Mary Blacham, S. C. Robertson and other surveys. A 2,000-foot test is also scheduled.

Sherman and Dodd, independent operators of Longview, are assembling a block of approximately 7,000 acres centering in the W. H. Baird Survey, 2 miles southeast of Rockwall in Rockwall County, for a 3,500-foot test. Seismograph crews are checking the block.

Another block of 7,500 or 8,000 acres, starting at the north line of Rockwell County and extending south along the east fork of the Trinity River for about 4 or 5 miles, is being assembled for a Woodbine sand test.

Long and Wolfe and others have staked location 375 varas from the north line and 2,060 varas from the west line of the survey, on the Chapman farm, 6 miles west of Greenville in Hunt County, for a Woodbine test. Tom Cunningham's No. 1 M. G. McKee, to be drilled in the M. Snell Survey near the town of Bruceville, is in McLennan County, 940 feet from the south line and 2,640 feet from the west line of a 640-acre tract.

Abercrombie and others have a derrick up for No. 2 Bowers and Grant in the P. D. Midkiff Survey, 8 miles northwest of Clarksville in Red River County, 1,100 feet from the north line and 6,140 feet from the west line of the survey.

Cayuga Field—Anderson County

There were three wells completed, one a gas well in the Cayuga Field, this week. One of the oilers was west of production on the northwest side of the field and the gas well in the northwest extension. The third test, an oil well, was drilled on the Royall farm inside the field.

Angelina Location

Bryan and Lyons of Lufkin, Tex., have staked location on the J. F. Allen and others farm in the A. S. Burnes Survey and E. Goquet grant, for a test.

EAST TEXAS FIELD

M. W. McVey's No. 1 Mrs. S. J. Richards, in the northeast corner of a 115-acre tract, Mary Van Winkle Survey, southeast of Kilgore in Gregg County, was reported good for 125 bbls. of oil per hour. Total depth was logged at 3,495 feet, 1 foot in the sand. This location is about 1 mile east of production, and east of a hole abandoned soon after the Kilgore area was drilled to any extent. Erratic sand conditions have been found all along the east edge where extensions have proved several hundred more acres to production.

Locations continue about half of what they have been for many months, only 61 having been staked this week while 89 wells were completed. Among the completed wells were seven completing swabbing and nine completed as pumpers. Two tests stepped over the producing edges or missed sand lenses and were abandoned. The dry holes were in Rusk and Upshur Counties.

From July 12 to 18 permits were granted by the Railroad Commission for the drilling of five tests for tracts of one acre or less. Permit was given for drilling a test on a city lot of less than one-half acre on which one well was producing. There were 48 permits granted for tests on acreage which now has an average of one well to each five and one-half acres. Permits on small tracts are dwindling although a few permits for exceptions to Spacing Rule No. 37 are being granted from time to time.

Grayson County Wildcat

Gardner Petroleum Co. and others

of Tulsa have a large block near Denison in Grayson County, centering north of Pottsboro where there have been some shallow wells drilled, and are preparing to sink a deep test on the Preston anticline. Skelly Oil Co. is also said to be interested in the block and the proposed test is expected to go to around 6,000 feet to give the Simpson formation a thorough testing.

EAST TEXAS COMPLETIONS

Anderson County

Kirby Petroleum Co.'s No. 1 Loper, total depth 4,075 feet, gas well, no gauge. Roeser & Pendleton, Inc.'s No. 2 Ware & Wilson, total depth 4,080 feet, initial production 56 bbls. in 24 hours through ⅞-inch choke. Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 1 Royall, total depth 4,095 feet, initial production 106 bbls. in 24 hours through ⅛-inch choke.

Henderson County

Neff and others' No. 1 Small, dry and abandoned 4,054 feet, elevation 284 feet.

Navarro County

Thomason's No. 1 Moran, elevation 451 feet, dry and abandoned 2,087 feet, 3 miles northwest of Corsicana, top sand 2,077-79 feet.

Van Zandt County

Pure Oil Co.'s No. 5 Camper, total depth 2,938 feet, initial production 40 bbls. per hour through ½-inch choke, top Woodbine 2,870 feet.

Wood County

Atlatl Royalty Co.'s No. 1 Goldsmith, dry and abandoned 5,040 ft., 3½ miles northwest of Quitman.

Gregg County

Amerada Petroleum Corp.'s No. 11 Burnside, top pay 3,509 feet, total depth 3,539 feet, initial production 75 bbls. per hour. Arkansas Fuel Oil Co.'s No. 8-A Smith, top pay 3,483 feet, total depth 3,508 feet, initial production 28 bbls. in 15 minutes; No. 11 Whittaker, top pay 3,516 feet, total depth 3,541 feet, initial production 24 bbls. in 15 minutes.

Atlantic Oil Producing Co.'s No. 20-A Burnside, top pay 3,506 feet, total depth 3,630 feet, initial production 130 bbls. per hour; No. 35-A Burnside, top pay 3,531 feet, total depth 3,556 feet, initial production 75 bbls. per hour; No. 6 Flemister, top pay 3,554 feet, total depth 3,597 feet, initial production 138 bbls. per hour; No. 62 Moore, top pay 3,495 feet, total depth 3,525 feet, initial production 120 bbls. per hour; No. 66 Moore, top pay 3,512 feet, total depth 3,541 feet, initial production 134 bbls. per hour; No. 70 Moore, top pay 3,491 feet, total depth 3,524 feet, initial production 132 bbls. per hour; No. 13 Prichard, top pay 3,515 feet, total depth 3,538 feet, initial production 138 bbls. per hour.

Fain & McGaha's No. 8 Bauknight, top pay 3,569 feet, total depth 3,622 feet, initial production 25 bbls. in 15 minutes. Gulf Production Co.'s No. 14 Lacy-Snider, top pay 3,506 feet, total depth 3,537 feet, initial production 70 bbls. per hour. Johnson's No. 2 Mattox, top pay 3,605 feet, total depth 3,612 feet, initial production 10 bbls. in 30 minutes.

Lucey Petroleum Co.'s No. 10 McIlaney-Loeb, top pay 3,527 feet, total depth 3,542 feet, initial production 62 bbls. in 30 minutes. Rancho Oil Co.'s No. 3 Johnson, top pay 3,607 feet, total depth 3,616 feet, initial production 40 bbls. in two hours. Sabinas Oil Co.'s No. 5-A Collins, top pay 3,643 feet, total depth 3,649 feet, initial production 75 bbls. per hour. Shell Petroleum Corp.'s No. 4 Cabinass, top pay 3,592 feet, total depth 3,595 feet, initial production 10 bbls. per hour, pumping. Schulman's No. 1 Skipper, top pay 3,563 feet, total depth 3,590 feet, initial production 4 bbls. per hour, pumping.

Sinclair Prairie Oil Co.'s No. 18 Williams, top pay 3,496 feet, total depth 3,530 feet, initial production 35 bbls. in 15 minutes; No. 21 Williams, top pay 3,490 feet, total depth 3,525 feet, initial production 35 bbls. in 15 minutes. Sowell's No. 1 Turner, top pay 3,588 feet, total depth 3,589 feet, initial production 40 bbls. per hour through 1-inch choke. Stewart Oil Co.'s No. 1 Mrs. Killingsworth, top pay 3,585 feet, total depth 3,599 feet, initial production 50 bbls. in 24 hours, swabbing.

Sun Oil Co.'s No. 14 Satterwhite, top pay 3,550 feet, total depth 3,620 feet, initial production 60 bbls. per hour. Superior Oil Co.'s No. 20 Prichard, top pay 3,529 feet, total depth 3,559 feet, initial production 130 bbls. per hour. American Liberty Oil Co.'s No. 6 Elder, top pay 3,538 feet, total depth 3,619 feet, initial production 20 bbls., swabbing. Arkansas Fuel Oil Co.'s No. 11 Brown, top pay 3,589 feet, total depth 3,616 feet, initial production 25 bbls. in 15 minutes. Atlantic Oil Producing Co.'s No. 17-A Anderson, top pay 3,596 feet, total depth 3,611 feet, initial production 110 bbls. per hour.

Gulf Production Co.'s No. 11 Charles, top pay 3,598 feet, total depth 3,607 feet, initial production 60 bbls. per hour; No. 68 Hilburn, top pay 3,502 feet, total depth 3,530 feet, initial production 65 bbls. per hour. Harcher Oil Co.'s No. 1 Crim, top pay 3,545 feet, total depth 3,585 feet, initial production 40 bbls. per hour. Patrick Production Co.'s No. 3 Watson, top pay 3,595 feet, total depth 3,655 feet, initial production 60 bbls. per hour. Invincible Oil Co.'s No. 18 Weiss, top pay 3,521 feet, total depth 3,535 feet, initial production 125 bbls. per hour; No. 25 Weiss, top pay 3,509 feet, total depth 3,523 feet, initial production 125 bbls. per hour.

Jones' No. 10 Lacey, top pay 3,550 feet, total depth 3,570 feet, initial production 50 bbls. per hour. Lacy's No. 5 Reed, top pay 3,549 feet, total depth 3,561 feet, initial production 120 bbls. per hour. Tom Potter's No. 3 Barton, top pay 3,540 feet, total depth 3,624 feet, initial production 20 bbls. per hour, swabbing. Tom Potter et al's No. 4 Barton, top pay 3,546 feet, total depth 3,560 feet, initial production 20 bbls. per hour, swabbing. Potter's No. 1 Fee, top pay 3,538 feet, total depth 3,620 feet, initial production 20 bbls. per hour, swabbing. Shell Petroleum Corp.'s No. 27 Elder, top pay 3,538 feet, total depth 3,611 feet, initial production 40 bbls. in 30 minutes; No. 28 Elder, top pay 3,557 feet, total depth 3,633 feet, initial production 45 bbls. in 30 minutes.

Sinclair Prairie Oil Co.'s No. 47-A King, top pay 3,495 feet, total depth 3,530 feet, initial production 35 bbls. in 15 minutes; No. 13-B King, top pay 3,448 feet, total depth 3,465 feet, initial production 25 bbls. in 15 minutes; No. 16-B King, top pay 3,420 feet, total depth 3,463 feet, initial production 25 bbls. in 15 minutes.

The Texas Co.'s No. 11 Baxter, top pay 3,642 feet, total depth 3,682 feet, initial production 32 bbls. in 15 minutes. Town's No. 3-B Davis, top pay 3,608 feet, total depth 3,622 feet, initial production 32 bbls. in 27 minutes. Turnbow's No. 2 Lacey, top pay 3,555 feet, total depth 3,600 feet, initial production 20 bbls. per hour.

Rusk County

Champlin & Bass' No. 2 Roberson, top pay 3,611 feet, total depth 3,624 feet, initial production 45 bbls. per hour. E. C. R. Oil Co.'s No. 7 Sherow, top pay 3,578 feet, total depth 3,645 feet, initial production 150 bbls. in 21 hours, pumping. Groeman's No. 2 Mayfield, top pay 3,616 feet, total depth 3,672 feet, initial production 10 bbls. in 15 minutes. Gulf Production Co.'s No. 35-C Christian, top pay 2,692 feet, total depth 3,699 feet, initial production 82 bbls. per hour; No. 6-A Sexton, top pay 3,641 feet, total depth 3,709 feet, initial production 34 bbls. per hour through ¾-inch choke.

Hardin's No. 2 Peterson, top pay 3,530 feet, total depth 3,617 feet, initial production 35 bbls. per hour. Horse Shoe Syndicate's No. 3 Brightwell, top pay 3,654 feet, total depth 3,675 feet, initial production 100 bbls. per hour. Shell Petroleum Corp.'s No. 20 Russell, top pay 3,635 feet, total depth 3,771 feet, initial production 20 bbls. in 30 minutes. Sun Oil Co.'s No. 22 Beall, top pay 3,597 feet, total depth 3,608 feet, initial production 53 bbls. per hour.

A. Gey Drilling Co.'s No. 2 Moore, top pay 3,534 feet, total depth 3,599 feet, initial production 20 bbls. per hour, pumping. Bromley Oil Co.'s No. 3 Cooper, top pay 3,535 feet, total depth 3,573 feet, initial production 60 bbls. in 10 hours, pumping. Atlantic Oil Producing Co.'s No. 15-A Pinkston, top pay 3,645 feet, total depth 3,671 feet, initial production 125 bbls. per hour. British American Oil Co.'s No. 10 Stone, top pay 3,639 feet, total depth 3,659 feet, initial production 78 bbls. per hour. Carey's No. 1 Grey, top pay 3,533 feet, total depth 3,573 feet, initial production 8 bbls. per hour, pumping.

Currin' Oil Co.'s No. 1-B Frederick, top pay 3,550 feet, total depth 3,622 feet, initial production 20 bbls. per hour. Gant and others' No. 4 Harris, top pay 3,558 feet, total depth 3,608 feet, initial production 12 bbls. per hour. Greer and others' No. 1 Rollins, top pay 3,697 feet, total depth 3,706 feet, dry and abandoned. Gulf Production Co.'s No. 9-C Mayfield, top pay 3,635 feet, total depth 3,644 feet, initial production 55 bbls. per hour through ¾-inch choke.

Humble Oil & Refining Co.'s No. 16 Walker, top pay 3,639 feet, total depth 3,659 feet, initial production 67 bbls. per hour. K. P. Oil Co.'s No. 4 Alford, top pay 3,595 feet, total depth 3,697 feet, initial production 25 bbls. in 30 minutes, swabbing. Mabee, Consolidated Corp.'s No. 2-A Maxwell, top pay 3,560 feet, total depth 3,665 feet, initial production 20 bbls. per hour, pumping.

Nivia Oil Co.'s No. 3 Bradford, top pay 3,552 feet, total depth 3,620 feet, initial production 10 bbls. per hour, pumping. Octo Oil Co.'s No. 1 Crook, top pay 3,558 feet, total depth 3,620 feet, initial production 30 bbls. in 10 hours, pumping; No. 3 Crook, top pay 3,546 feet, total depth 3,600 feet, initial production 20 bbls. in 10 hours, pumping. Broughton and others' No. 4-C Bradford, top pay 3,510 feet, total depth 3,661 feet, initial production 5 bbls. in 2 hours swabbing. Century Refining Co.'s No. 1 Shaw, top pay 3,665 feet, total depth 3,745 feet, initial production 40 bbls. per hour.

Sinclair Prairie Oil Co.'s No. 60 Kinney, top pay 3,654 feet, total depth 3,662 feet, initial production 29 bbls. in 15 minutes; No. 61 Kinney, top pay 3,674 feet, total depth 3,682 feet, initial production 35 bbls. in 15 minutes. Stanolind & Pure Oil Co.'s No. 57 Siler, top pay 3,666 feet, total depth 3,699 feet, initial production 24 bbls. per hour. Sun Oil Co.'s No. 10 Lee, top pay 3,625 feet, total depth 3,627 feet, initial production 60 bbls. per hour. Turman Oil Co.'s No. 10 Deason, top pay 3,683 feet, total depth 3,765 feet, initial production 63 bbls. per hour.

Smith County

Session's No. 10 Stone, top pay 3,756 feet, total depth 3,758 feet, initial production 60 bbls. per hour. Sinclair Prairie Oil Co.'s No. 48-A Mayfield, top pay 3,816 feet, total depth 3,818 feet, initial production 20 bbls. in 20 minutes. Texas-Canadian Oil Co.'s No. 2 Jackson, top pay 3,783 feet, total depth 3,784 feet, initial production 20 bbls. in 20 minutes.

Upshur County

Delta Drilling Co.'s No. 4 Hamilton, top pay 3,757 feet, total depth 3,772 feet, initial production 10 bbls. per hour, swabbing. Eastern Texas Petroleum Co.'s No. 5 Dunbar, top pay 3,642 feet, total depth 3,660 feet, initial production 22 bbls. per hour by heads. Humble Oil & Refining Co.'s No. 30 Edwards, top pay 3,616 feet, total depth 3,641 feet, initial production 80 bbls. per hour; No. 6 Smith, top pay 3,626 feet, total depth 3,635 feet, initial production 46 bbls. per hour. Nathan Oil Co.'s No. 2 Victory, top pay 3,586 feet, total depth 3,587 feet, initial production 55 bbls. per hour. Peckham Oil Co.'s No. 10 Hamilton, dry and abandoned at 3,748 feet.

Limestone County

Schweisinger and others' No. 1 Fee, dry and abandoned 1,274 feet, top sand 1,270 feet, top Austin 727-980 feet, SE of Mt. Calm 3 miles.

Admit Natural Gas Men

TORONTO, Ontario, July 29.—The Canadian Gas Association, heretofore representative of the manufactured gas industry in Canada, is amending its constitution and by-laws to admit natural gas operators to membership and active participation in the association.

Enterprise, Pa., Well

PITTSBURGH, Pa., July 27.—The Dell Oil Co. reported an oil well, 575 feet deep, flowing on the Dell farm on the Tidioute Road, near Enterprise, Warren County. The well came in 15 to 18 bbls. a day. The owners are Martin Miller, Robert H. Braun, Jr., Harry J. Lewis, Fred Ferret.

Saskatchewan Gasser

LLOYDMINSTER, Saskatchewan, July 29.—In the Lloydminster Field, western Saskatchewan, Colony Oil & Gas Co.'s No. 1, Section 25-49-27w3, has blown into production in the lower sand with an estimated flow between 20,000,000 and 30,000,000 feet a day. The heavy pressure lifted the tools out of the hole.

North Louisiana, Arkansas

GEOLOGISTS, LAND MEN AND SCOUTS ACTIVE IN RODESSA

By
J. R. CRUMPTON

SHREVEPORT, La., July 29.—The 18 new locations staked in the North Louisiana district during the past week are far above the average for several years, but fail to reflect the feverish activity in this area. Nine of the new operations were in the recently discovered Rodessa oil area and are evidently a forerunner of many others. This whole area is a beehive of activity from the southwestern part of Miller County, Arkansas, and extending southwest far into Cass and Marion Counties in East Texas. Aside from leasing and mineral buying there is a systematic plan in operation to work out the potential deep oil structure.

Several major companies have geophysical crews establishing shot points along the trend from the southwestern extremity to the northeast. Among the companies working in the area with geophysical crews are the Arkansas-Louisiana Gas Co., a subsidiary of Cities Service, Shell Petroleum Co. and Tide Water Oil Co. Practically all of the major companies which for the past few years have been operating in the East Texas Field have geologists, land men and scouts in the Rodessa Field with headquarters in Shreveport.

Other Areas Getting Play

In addition to the impetus given to Rodessa by the deep oil strike, other Trinity areas in North Louisiana are getting a play as possible oil fields from this horizon. The Sligo Field in Bossier Parish, Cotton Valley and Shongaloo areas in the northern part of Webster Parish and the Sugar Creek and Lisbon territory in Claiborne Parish report unusual activity in leasing and mineral purchases.

United Gas Public Service Co.'s No. 1 I. L. Young, Section 21-23-16, the discovery well of Rodessa, definitely proved itself a real oil well on second test in the past week. After drilling plug from 5-inch casing set at 5,555 feet inside of a leaky string of 7-inch, the well flowed 116 bbls. per hour on tubing through one-half inch choke and 65 bbls. per hour through one-quarter inch choke. The well is estimated to have a potential open flow of 15,000 to 25,000 bbls. daily. Because of lack of storage it will be several days before a good check can be made of the daily flow. The Standard Pipe Line Co. of Louisiana will have completed within a few days an 8-inch line from its main Oklahoma-Baton Rouge line to the field, a distance of about 8 miles.

Three Independents Included

Three independent operators of Shreveport are among those making locations in the new field during the past seven days. R. W. Norton, who drilled the first gas well about five years ago and afterwards sold the gas rights to United Gas Public Service Co. on the 26,000-acre block, has staked location for his No. 1 Caddo Levee Board in Section 21-23-16, an offset to the north of the discovery well. O'Brien Brothers have derrick up on No. 1 Rodessa Oil & Land Co. in the southwestern part of Section 14-23-16, and D. C. Richardson and the Eastern Texas Production Co. will spud in on No. 1 Caddo School Board in Section 23-23-16, within the Rodessa townsite.

Haynes Brothers Drilling Co.'s No. 1 Tyson, Section 24-23-16, 2¾ miles east of the discovery well, is drilling in lime at 3,342 feet. The Arkansas-Louisiana Gas Co. and United Gas made up the other new locations. All of the new tests are north and northeast, most of them from 1 to 2 miles from No. 1 Young. United Gas Public Service Co.'s No. 1 D. F. Barr, Section 29-23-16, a mile southwest on the gas structure, is being carefully watched as it nears the pay horizon. The well is coring at 5,943 feet, with 7-inch casing set at 5,612 feet. The next week should show whether or not this well will be in the oil trend or another big gasser.

Two Interesting Tests

Two interesting wildcat tests were staked on the eastern flank of the Sabine uplift in North Louisiana. In Lincoln Parish, southwest of the town of Simmsboro, Herman L. Brown and others are rigging up to drill No. 1 Monstead in Section 10-17-4w. The test is on the Grambling structure, in the vicinity of a well drilled last year by the Eastern Texas Production Co., on which the Blossom sand checked higher than in a well drilled several years ago to the northeast. The structure has potential Blossom possibilities, but if this horizon fails to pay, it is planned to make a deeper test. In the northwestern part of Bienville Parish, M. V. Duncan and others have staked their third test on a large block of acreage. Derrick has been erected on No. 1 J. Miller, SW cor. NW Section 9-18-7. Recent core tests developed that the base of the Cane River was higher to the southwest of the two previous tests, the whole structure being on the flank of a salt dome.

Two wildcats in the vicinity of Eros, one in Jackson Parish and the other in Ouachita Parish, have reached the first testing stage. In the former, American Liberty Oil Co.'s No. 1 Lusk, Section 1-16-1w, cored sand from 3,586-92 feet and is arranging to make a drill stem test. In Ouachita, the same company's No. 1 Golson, Section 25-17-1e, cored sand from 3,450-95 feet and drill stem test developed 16 fourbles of salt water in 15 minutes. The crew is coring ahead at 3,498 feet. About 8 miles east of Shreveport in Bossier Parish, R. L. Skidmore and others' No. 1 Davis, Section 12-18-13, is arranging to make a drill stem test of a good show of gas encountered at 2,250 feet. The show is coming from an unknown sand about 200 feet below the Blossom, the drilling log on the test showing the top of the Nacatoch at 1,015 feet and the top of the Blossom at 1,982 feet. Critchett & Woods' No. 1 Kraft, Section 18-11-3e, Caldwell Parish, tested salt water at 1,725 feet and is drilling ahead at 1,935 feet.

Rodessa area, Caddo Parish

Daily Production

Estimated daily gross production all companies week ending July 26, 1935:

NORTH LOUISIANA

Bellevue	595
Caddo light	5,145
Caddo heavy	1,905
Converse	1,165
Cotton Valley	415
De Soto and Red River	1,420
Elm Grove	440
Haynesville	3,460
Holly	145
Homer	2,690
Pleasant Hill	150
Sarepta-Carterville	530
Urania	2,950
Zwolle	1,620
Total	22,630

SOUTH ARKANSAS

Champagnolle	2,530
El Dorado	2,255
Lisbon	395
Miller County	1,510
Nevada	870
Smackover light	2,280
Smackover heavy	18,100
Stephens	625
Urbana	2,000
Total	30,475

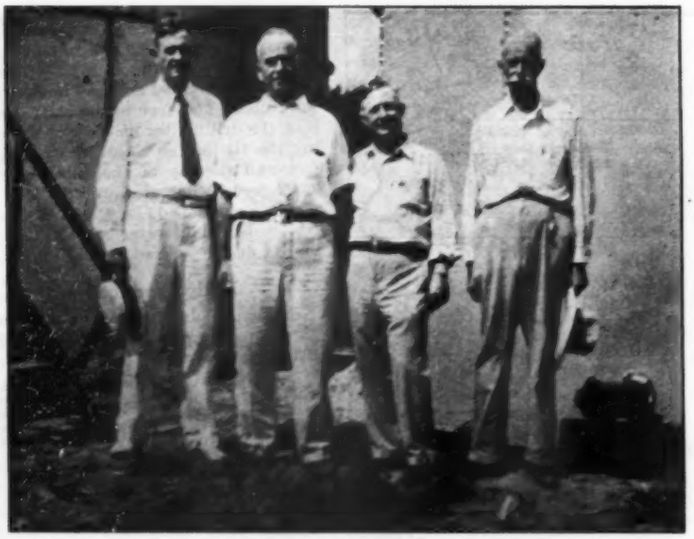
Six Other Completions

The North Louisiana district reported six completions aside from the Rodessa well, consisting of three gas wells, one oil well and two dry holes. Maury Drilling Co.'s No. 5 Frierson, Section 29-19-4e, Ouachita Parish, has an open initial flow of 1,363,000 feet of gas with 674 pounds rock pressure from 2,181 feet, and in the same parish, Pioneer Gas Co.'s No. 1 Filhoil, Section 11-18-4e, is making 337,000,000 feet under 378 pounds rock pressure from 2,215 feet. In the Union Parish area of the Monroe Field, Carbons Consolidated's No. 1 Feazel,

Section 8-20-3e, gauged 1,250,000 feet of dry gas with 985 pounds rock pressure from 2,139 feet. A wildcat in this parish, C. H. Murphy, trustee's No. 1 J. B. McCormick, Section 7-23-1w, was dry and abandoned at 3,556 feet. The other dry hole was Rich Plain Oil Co.'s No. 1-A S. H. Bolinger, Section 22-22-13, just south of Plain Dealing in the northern part of Bossier Parish. This test, an offset to an old well completed in 1917 which flowed at the rate of 1,500 bbls. per day for several days before going dead, was abandoned as salt water at 3,142 feet. A good body of sand was cored in the well, but salt water intrusion, probably from the old well nearby, had killed any show of oil or gas. The lone producer was from the old Caddo Field. The Texas Co.'s No. 4 School fee, Section 16-20-15, is pumping 40 bbls. daily at 2,202 feet.

ARKANSAS

The southwestern part of Miller County, a few miles northeast of the Rodessa Field in Caddo Parish, Louisiana, is experiencing a lease play with several good blocks for drilling in the making, but to date no locations have been staked. Lafayette County will be a hot spot for wildcat interest during the next few months as a result of announcements of four new tests in that area, three of them to be drilled to the Rodessa horizon from 6,000 to



At the testing of United Gas Public Service Co.'s No. 1 Young, in the Rodessa Field, left to right: R. W. Norton, discoverer of the field; F. E. Lacaze, division manager for United Gas system; B. M. Nowrey, general superintendent of production for United Gas, and I. L. Young, Rodessa storekeeper, on whose land the well was drilled

7,000 feet. Joe Modisette of El Dorado, Ark., has leased 10,000 acres from Red River Lumber Co. centering around Section 29-19-24, Lafayette County, and has contracted to begin a 6,000-foot test within 90 days. The wildcat will be southeast of the old Bradley Field and about 8 miles east of Kamon & Neely's No. 1 Cockran, Section 26-19-25, which is arranging to run Schlumberger test at 4,450 feet. Irwin & Wadley of Texarkana are making arrangements to drill a 7,000-foot test on the Stamps structure near the town of Stamps in Lafayette County. The test will be on a block of about 10,000 acres. Six miles southwest of this test, Earl F. Fox, independent operator of Shreveport, is moving in rig to drill his No. 2 Coleman Brothers, NE NE Section 30-16-24. The new test is 1½ miles northeast of one drilled by Fox & Langford in 1932 which showed a good body of sand with a slight show of oil. The area of the two last-named wells in Lafayette County is adjacent to the old Balcones fault, known locally as the Humble fault, and is 15 miles north of the Bradley Field in the south part of the county.

Tests to Be Drilled

In Hempstead County J. B. Yates of Winchester, Ky., has assigned 4,000 acres out of a 5,000-acre block to J. R. Gardner with the stipulation that the latter drill a 3,500-foot test to begin not later than September 15. The block centers around Section 32-12-23. A new Ashley County wildcat has spudded in. Texas Seaboard Oil Co.'s No. 1 fee, Section 28-17-4, is drilling at 400 feet. The operators purchased in fee about 200 acres on which the well is located and surrounded it with 9,000 acres of leases with a contract to drill a 3,500-foot test. Snow Black Petroleum Co. recently spudded in on its second test in Ouachita County No. 1 J. Bedford, Section 32-11-18, having set 10-inch surface casing at 62 feet and drilling ahead at 953 feet.

Gulf Refining Co.'s No. 49 Louis Werner, Section 5-16-16, a deep test in the Smackover area, is shut down for rig repairs at 7,645 feet. A wildcat in Calhoun County, the Hunter Co.'s No. 1 Stout Lumber Co., Section 33-16-13, has derrick pattern on location. J. G. Cubage and others' No. 1 Rhea, Section 12-17-22, Columbia County, has set 10-inch at 120 feet and drilling at 2,240 feet. Only one completion was reported from the Arkansas district, W. O. White, trustee's No. 1 Parker Brothers, Section 26-13-18, marked another failure for the area west of Camden where one wildcat was brought in as a small producer. The test was abandoned in salt water at 1,358 feet.

Dr. E. H. Sellards, director of the Bureau of Economic Geology of the University of Texas, Austin, made a talk on the "Structural Map of Texas" to the Dallas Petroleum Geologists in that city on the evening of July 22.

Canada's Geological Survey Extending Investigations

By VICTOR LAURISTON

OTTAWA, Canada, July 29.—The Geological Survey of Canada has undertaken this year an extended search for structures favorable to the accumulation of petroleum and natural gas. Opportunity for the enlarged program of field work was provided when the Canadian parliament in the Supplementary Public Works Construction Act, 1935, approved an appropriation of $1,000,000 for geological surveys and investigations. This vote has permitted the expansion of the investigations and mapping of the survey to several times the magnitude of such undertakings in recent seasons and, though the major part of the field program is concerned with finding favorable areas in which to prospect for gold, silver and other metallics, a considerable sum of the funds available has been set aside for projects in areas of promise for oil and gas.

W. A. Gordon, minister of mines, has announced that the oil and gas investigations will be carried on in five areas, two in eastern Canada and three in western Canada. Those in eastern Canada are both in the province of Ontario, one embracing Manitoulin Island in Georgian Bay and the other almost the entire southwestern peninsula of the province lying between Lake Erie on the south and Lake Huron and Georgian Bay to the west and north. In western Canada, one of the projects will extend from Edmonton across eastern Alberta and western Saskatchewan to the vicinity of North Battleford, covering 40,000 square miles and taking in a belt on both sides of the North Saskatchewan River. Another project will extend the investigations from North Battleford eastward across Saskatchewan to the Manitoba boundary, covering approximately 25,000 square miles. The third project in western Canada covers 6,500 square miles in the southeastern corner of Alberta, including the section south of the Milk River adjacent to the Kevin-Sunburst Field in Montana.

Field Organizations

Strong field organizations have been appointed to take charge of the oil and gas investigations. The large project in southwestern Ontario, in an area where 23,000,000 bbls. of oil valued at $31,500,000 has been produced since 1881 and the recovery of natural gas has had a value of $95,000,000 since 1892, is being directed by Dr. C. S. Evans and Dr. J. S. Stewart. Doctor Evans is a postgraduate of Princeton and Doctor Stewart obtained his Ph.D. at Yale. Both heads of the survey have had extended experience in natural gas and petroleum geology and they will seek information to indicate where drilling might have reasonable chances of discovering additional oil and gas. The Manitoulin Island investigation, which is of smaller extent, is being directed by Dr. M. Y. Williams, another experienced petroleum geologist with years of service on the Geological Survey staff.

Dr. G. S. Hume, well known for his petroleum and natural gas investigations in Alberta and Saskatchewan on behalf of the Geological Survey of Canada, is directing the Eastern Alberta-Western Saskatchewan project. Included in his staff are Professors R. L. Rutherford and P. S. Warren of the department of geology at the University of Alberta; Dr. C. H. Crickmay, formerly a professor at the University of Illinois, and Dr. C. O. Hage, graduate of the University of Saskatchewan. The region to be covered by the parties working under Doctor Hume is considered to hold one of the greatest known potential natural gas reserves in western Canada. Edmonton, capital city of Alberta, draws its natural gas supply from the Viking area, and other important gas fields include Kinsella, Fabyan, Wainwright and the new field at Lloydminster, on the Alberta-Saskatchewan boundary. Wells in the Wainwright Field are producing a small amount of crude.

Eastern Saskatchewan

Dr. R. T. D. Wickenden, whose previous work for the Geological Survey included bed-rock geology in the southern part of the province in which he is located this summer, is in charge of the Eastern Saskatchewan project. He is working across that province from Doctor Hume's survey, his district extending to Hudson Bay Junction. Near this point there has been considerable drilling recently and strikes of oil and gas are reported. In the center the area takes in from Saskatoon to Prince Alberta, or a breadth of about 90 miles. Mr. Wickenden's personnel includes Dr. T. B. Williams, Dr. Roy Graham and R. L. Hewitt, each of whom is in charge of the investigations in a division of the territory.

Dr. L. S. Russell, post-graduate of Princeton, in charge of the investigations in southeastern Alberta, continues on a broader scale his studies in the southern part of the province where he has worked for several seasons. The area, east of Lethbridge and south to Coutts on the international boundary, contains a number of proven gas fields, such as Bow Island, Foremost and Medicine Hat. The Rogers-Imperial well, south of Foremost, probably had the largest initial flow of any gas well ever drilled in Canada. Oil is being obtained in the Red Coulee Field near Coutts and is present in the Skiff Field. The principal discoveries of the region, however, are south of the boundary in the State of Montana where intensive development has taken place in recent years. It will be Doctor Russell's task to prove, if possible, that the structures favorable for oil do not stop at the 49th parallel, as might be assumed from the location of the wells now producing. With Doctor Russell as chiefs of subparties are Dr. J. C. Sproule, R. W. Landes and W. C. Howells, each of whom is conversant with the geological problems of southern Alberta.

Texas and Louisiana Gulf

DISCOVERY OF TWO POOLS IS AMONG WEEK'S HAPPENINGS

By F. L. SINGLETON

HOUSTON, Tex., July 29.—Discovery of two new pools, one an oil field in Liberty County and the other a gas field in Galveston County, with the possibility of another deeply seated geophysical prospect in Coastal Louisiana proving productive, were among developments on the Gulf Coast the past week.

J. W. Frazier and others' No. 2 Lynott and Buffum, a wildcat test 10 miles north of Liberty in the James Robeson Survey, Liberty County, was washed in and started flowing an estimated 20 bbls. of 36.8 gravity oil per hour through a one-quarter inch choke, with tubing pressure 300 pounds and casing pressure 700 pounds. On a 46-hour gauge ending at 4 a.m. July 26, it produced 650 bbls. on various chokes, with tubing pressure 1,000 pounds and casing pressure 1,225 pounds.

The test originally was drilled to 7,851 feet, where it was plugged back to 7,550 feet and sidetracked. In drilling the new hole the operators drilled back into the old hole and drilled out cement to 7,685 feet (corrected depth). After an electrical coring test 7-inch casing was cemented on bottom and production was obtained after the casing had been perforated with 38 holes from 7,663-73 feet.

Production is coming from approximately 45 feet of the upper Saline Bayou formation, which is a relatively new formation to be found productive on the Gulf Coast. It produces in the Hull Field, Liberty County, the Batson Dome in Hardin County and was proven for gas production on a wildcat test drilled by Stanolind Oil & Gas Co. in Waller County.

Active Development Expected

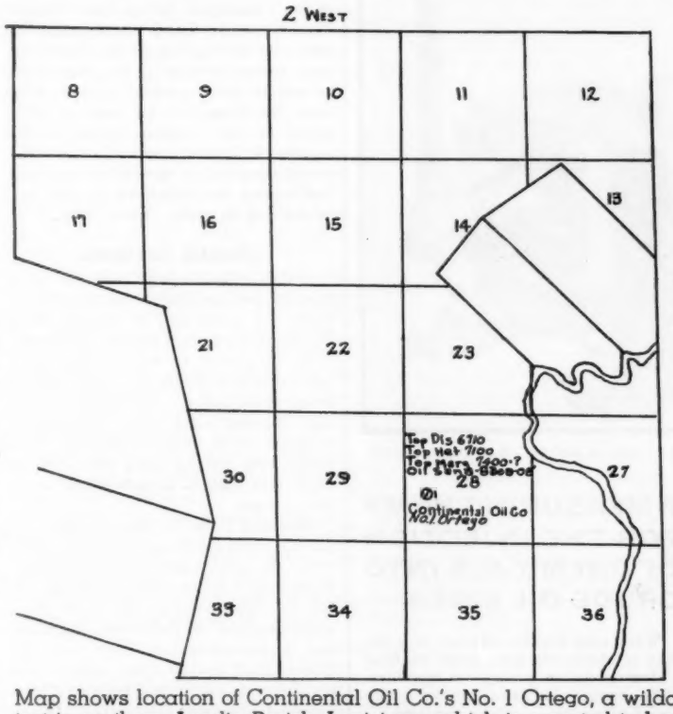
As the leases around the discovery well are held by numerous companies, much development is expected to be started at an early date. Two proposed locations have been announced by the Gulf Production Co. and L. W. Wickes, who own north and south offset acreage. Other companies holding acreage near the well are Amerada Petroleum Corp., Magnolia Petroleum Co., Atlantic Oil & Producing Co., Woodley Petroleum Co. and Mills Bennett Production Co.

The test is located west of a dry hole drilled by the same operators a few months ago which was reported to be checking approximately 500 feet high, yet the discovery well checks approximately 200 feet structurally lower than the first test. This is thought to be caused by a faulted condition between the two wells and further development is expected to explain this situation.

While no definite plans have been made regarding an outlet for the oil, proposals have been received by the operators from the Magnolia Petroleum Pipe Line Co. and the Atlantic Pipe Line Co., and a short line may be built to one of the main trunk lines which run from the West Texas district to the Coast. Both lines are less than 3 miles from the well.

The deeply seated geophysical prospect of Coast Petroleum Co., 2½ miles southwest of the Dickinson Field in Galveston County, was definitely proven for gas production when its No. 1 Maco Stewart was completed for a large gas well with a slight show of distillate. The well is bottomed at 8,543 feet and after 5-inch casing had been cemented on bottom, it was perforated with 36 holes from 8,510-35 feet, and the screen setting was made. Two-inch upset tubing was swung at 8,535 feet and after the well had been washed one hour and 20 minutes it started cleaning itself through a 16/64-inch choke, with tubing pressure 2,500 pounds and casing pressure 1,600 pounds. Late in the week it was still cleaning itself and was reported to have shown a slight increase in its distillate output.

Although the well is only 2½ miles southwest of the Dickinson Field it is looked upon as a separate dome, owing to the company's torsion balance picture of the area and the existence of a fault between the two fields established by the abandonment of Humble Oil & Refining Co.'s No. 1 Schaper, located southwest of production in the Dickinson Field.



Map shows location of Continental Oil Co.'s No. 1 Ortego, a wildcat test in northern Acadia Parish, Louisiana, which is reported to have cored 8 feet of saturated sand from 8,300-08 feet, the total depth. Casing has been cemented preparatory to testing

The test is on a block of 5,000 acres in the W. K. Wilson Survey.

Anahuac

Since the completion of Mason & McCarthy's No. 1 R. M. White last week for a 2-mile north extension to the Anahuac Field, northern Chambers County, two semiwildcat tests have been made northeast of the extension test, and four more locations were made in the field. One and one-half miles northeast of the White test, Woodley Petroleum Co. made location for No. 1 Blanke, 330 feet north and 990 feet east of the southwest corner of the H.&T.C. Survey No. 41. Four miles northeast on the L. C. Luckel block, in Section 33, T.&N.O. Survey, Texas Gulf Production Co. is reported to have made location for its No. 1 Simon. Offsetting the White test to the south, Sun Oil Co. is building derrick for its No. 1 White. The other locations were made by Humble Oil & Refining Co., No. 3 J. J. Clark in Section 57, H.&T.C. Survey; No. 5 Middleton in Section 58, H.&T.C. Survey, and No. 1-B Middleton in Section 56.

Dickinson

In Dickinson Field, Humble Oil & Refining Co. failed to complete its No. 2-A Maco Stewart for an oiler after plugging back the second time to 8,770 feet. It originally was drilled to 9,181 feet and was plugged back to 9,081 feet where it tested 104 bbls. of distillate per day through perforated casing from 9,086-92 feet. In an attempt to convert it into an oil well it was plugged back to 8,770 feet and when tested through perforated casing from 8,726-56 feet it showed for a gas well with a trace of distillate through a one-quarter inch choke, with tubing pressure 1,200 pounds and casing pressure 2,700 pounds. The company's No. 1 Hancom in the J. S. Sherman Survey is bottomed in oil sand showing oil at 8,045 feet, with 7-inch casing cemented at 8,022 feet. It topped the Discorbis at 6,303 feet, Heterostegina at 6,936 feet, Marginulina at 7,270 feet and the Frio at 8,010 feet.

Harris County

East of Houston in the Robert and Vince Survey, Harris County, Cockburn Oil Corp. has made location for its No. 1 R. E. Brooks, 330 feet north of the north bank of the ship channel and 330 feet from the west line of the R. E. Brook A tract. This is the second wildcat test drilled by the company on this prospect this year.

Wharton County

The second wildcat test to be announced for Wharton County within two weeks ago was made by the Navarro Oil Co. for its No. 1 Hahn, in the north central part of the county on a block of approximately 4,500 acres, centering around the Nosario Mancha Survey. Humble Oil & Refining Co., Sun Oil Co., Texas Co., Houston Oil Co. and several others companies are reported to have acreage around the block.

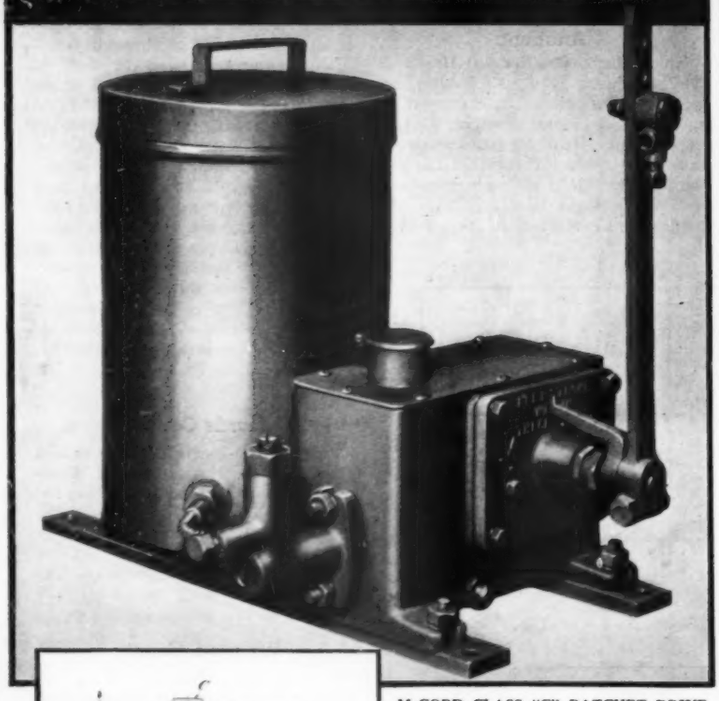
Brazoria County

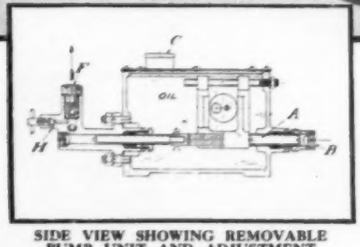
In the Old Ocean district, Brazoria County, Harrison & Abercrombie's No. 2 Bernard topped the oil sand at 8,646 feet and is bottomed in sand at 8,661 feet where it is fishing for 2,200 feet of stuck drill stem. As soon as the pipe is recovered a production test will be made. It is the second well to be drilled on the prospect since its discovery in 1934 and if productive it will extend production approximately 1,200 feet northwest. Location is in the Charles Breen Survey.

Hastings

Three producers are scheduled to be completed in the Hastings Field, northeastern Brazoria County. Humble Oil & Refining Co. cemented 7-inch casing at 6,068 feet in its No. 1 Lively, after it had topped the sand at 6,078 feet, and drilled to 6,099 feet. Location is in the A.C.H.&B. Survey No. 2. This will be the first well completed in the field other than by the Stanolind Oil & Gas Co. In the same survey, Stanolind Oil & Gas Co.'s No. 3 J. W. Surface is bottomed in oil

. . McCORD CHEMICAL MEASURING PUMP





SIDE VIEW SHOWING REMOVABLE PUMP UNIT AND ADJUSTMENT

McCORD CLASS "C" RATCHET DRIVE

A MEASURING PUMP FOR THE INJECTION OF CHEMICALS INTO CRUDE OIL LINES

When used for the delivery or injection of chemicals into crude oil lines an auxiliary chemical tank, made of terneplate, of three-gallon capacity is provided. This tank is connected to the suction side of the pump. For this service pump units, made of steel, are used. (Pump units made of other alloys can be supplied.)

The standard pump is furnished with a ½-inch plunger, ⅜-inch or ⅝-inch can be furnished, giving a wide range of delivery according to the driving speed. Adjustments are made from outside. A test screw is provided to check delivery of the liquid upon starting the pump. Another McCord feature is a double ball check valve at the end of the line, which holds the liquid in the line and insures immediate delivery of the liquid. Four standard types of drive are provided: ratchet reciprocating, rotary 37½ to 1, or a motor drive unit with a 68 to 1 reduction, or a direct rotary drive 1 to 1. A 5-inch or 7-inch pulley can be supplied on rotary drives.

CAPACITY

The ½-inch plunger model delivers one pint of liquid in 261 plunger movements. The ⅜-inch plunger model delivers one pint of liquid in 464 plunger movements, while the ⅝-inch plunger model delivers one pint in 167 plunger movements.

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sand at 6,100 feet with 7-inch casing cemented at 5,989 feet. Its No. 2 Turner is bottomed at 6,100 feet, with 7-inch casing cemented at 5,995 feet. On the extreme southeast side of the field, the company's No. 4 Sneed has apparently defined the structure in this direction, as it is coring in water sand below 6,382 feet and has not reported any showings of oil or gas. The water sand was topped at 6,270 feet. Since the test is only about 1,500 feet southeast of the nearest production and not over 2,000 feet from the Paul test which is one of the highest wells in the field, it is believed to establish the existence of a fault between it and the nearest producer.

Splendora

In the Splendora area, eastern Montgomery County, Paul Sanderson, trustee's No. 1 Texas Long Leaf Lumber Co. cored salt water sand from 5,987-91 feet and is shutdown at a total depth of 6,100 feet. This is apparently another failure for this district, which has been the scene of much wildcatting since Steen Drilling Co. completed its No. 1 Texas Long Leaf Lumber Co., a distillate producer. Location is in the Walker County School Land Survey, and the test may be carried to the upper Saline Bayou before it is abandoned. It topped the Cockfield sand at 5,730 feet. Northeast of the town of Magnolia in the western part of the county, V. E. Bolyard and others' No. 1 Atkinson in the Robert George Survey topped the Cockfield at 4,958 and is drilling in shale below 5,001.

Coastal Lousiana

A deep wildcat test regarded as a possible pool opener is Continental Oil Co.'s No. 1 Ortego, in northwestern Acadia Parish in Coastal Louisiana. It is preparing to test a sand at a total depth of 8,308 feet. The test is being made after an electrical coring test showed sand with possibilities of production from 8,299-8,308 feet. Seven-inch casing was cemented at 8,297 feet and it is scheduled to be tested soon.

The well is on a block of approximately 8,000 acres in Section 28-7s-2w about 15 miles north of the Jennings Field and 7 miles south of Basile. It topped the Discorbis at 6,710 feet, Heterostegina at 7,100 feet, Marginulina at approximately 7,400 feet, and is bottomed in the Frio sand which produces in many deeply seated geophysical prospects on the Gulf Coast.

Pure Oil Co.'s No. 6 Alliance Trust in the Gueydan Field, Vermillion Parish, Louisiana, is attempting to test a deep sand bottomed at 9,533 feet, which is approximately 5,000 feet deeper than the present producing horizon for the field. Production is being developed from the Miocene sands from 3,500 to 4,300 feet. Location is on the northwest flank of the dome in Section 33-11s-1w.

Large Block Taken

In Calcasieu Parish the Union Sulphur Co. is reported to have taken a block of 15,000 acres extending from the Big Lake road eastward through the Black Bayou district into area near Gerstner Field, south of Holmwood, and has agreed to start a wildcat test by October. This is one of the largest blocks recorded recently in coastal Louisiana and was taken after the company had worked the area with seismograph and torsion balance.

The Roanoke Field, Jefferson Davis Parish, received its second 10,000-foot active test when Humble Oil & Refining Co.'s No. 1 Nelson Thomas cored below 10,056 feet in sandy shale. Location is in Section 11-9s-4w. The other deep test is Shell Petroleum Corp.'s No. 1 Jarnigan, which is coring in shale and sand with no shows of oil or gas below 10,225 feet. Both tests are being drilled in search of the 10,000-foot sand which made its appearance in the Jarnigan test a few months ago, when it tried to blow out.

Owen Sound Gas Project

OWEN SOUND, Ontario, July 27. Definite steps are being taken by the Nottawa Oil & Gas Co. of Toronto to pipe natural gas to Owen Sound from a field recently developed near Hepworth and Shallow Lake in Bruce County.

Drilling was started some months ago by A. B. Holmes, who later organized the Nottawa Oil & Gas Co. The company has some 18,000 acres leased, and has drilled six tests, of which five were small gassers and No. 6 dry. Two outfits are at work and a third is being brought in.

The company has secured franchises for Amabel, Keppel, Sydenham, St. Vincent and Collingwood Townships and has a tentative arrangement to supply gas to Owen Sound. Nottawa Pipe Line Co., a wholly-owned subsidiary, will operate the transmission line. In addition to its own drilling, Nottawa Oil & Gas Co. will purchase gas from tests to be drilled by other companies on its acreage. Officers of Nottawa Oil & Gas Co. are: President, A. B. Holmes; vice president, G. Kastner; directors, R. Patterson and P. L. Jackson; secretary-treasurer, R. W. Little.

Choose State Officers

C. F. Sloane, Oklahoma City, was re-elected president of the Independent Marketers' Association of Oklahoma, holding its twentieth mid-year meeting at Oklahoma City. L. E. Kincannon, Duncan, was chosen first vice president and Jay Basolo, McAlester, second vice president. Other directors are A. W. Lee, Oklahoma City; Dick Gentry, Enid; Boyd Abbott, Durant; C. C. Henry, Altus; A. H. Holland, Enid; R. E. Copeland, Tulsa; E. C. Chech, Oklahoma City, and Rex Wingate, Cushing.

Leases and Royalties

A new and revised edition of Samuel H. Glassmire's book, "Law of Oil and Gas Leases and Royalties," is divided into four parts. The first deals with conservation, waste, proration, unitization and federal control. The second part is a legal treatment of the nature of the estates acquired in land and in minerals under a mineral deed and by virtue of the oil and gas lease. In part three the basic law of oil leases and royalties as applied to the standard lease and mineral deed forms has been discussed. Emphasis has been placed upon the different kinds of royalties which accrue thereunder together with a modern presentation of the lease covenants, express and implied as construed by late decisions of the courts. In the fourth part a topical summary of incidental topics pertaining to leases and royalties has been covered. Thomas Law Book Co., St. Louis, Mo., $7.50.

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Among Gulf Coast Drilling Contractors

C. & C. Drilling Co. completed a deep wildcat test for the Coast Petroleum as a large gas well from a total depth of 8,543 feet. The test is on the Maco Stewart lease, 2½ miles southwest of the Dickinson Field, Galveston County, and was completed through perforated casing from 8,510-35 feet. Five-inch casing was cemented at 8,543 feet. The company drilled to the contract depth of 8,000 feet in 18 drilling days. In the Livingston Field, the company completed a producer for E. D. Davenport and is skidding the rig over for No. 4 Watt, for the Gem Oil Co.

In the Anahuac Field, northern Chambers County, Glenn McCarthy completed McCarthy and Mason's No. 1 White for a 2-mile north extension to the field which has set off an extensive drilling campaign. McCarthy is building derrick for No. 2 White approximately 900 feet west of No. 1 White.

In the northern part of Colorado County, J. E. Hopper is moving in a rig for a 7,000-foot wildcat for Navarro Oil Co., on a block of approximately 4,000 acres centering around the Nosario Mancha Survey.

Talbot Drilling Co. has shut down its rig in the Splendora area, Montgomery County, after the well had tested salt water in the Cockfield sand. There is a possibility the test may be deepened for a test in the upper Saline Bayou. The well was dug for Paul Sanderson, trustee. In the same county and in the Magnolia area, the company is drilling below 5,000 feet in the upper Cockfield sand on a wildcat for V. E. Boylard, trustee. In the Willis area, northern part of the county, the company is drilling below the surface casing on T. T. Word, trustee's No. 1 Delta Land & Timber Co.

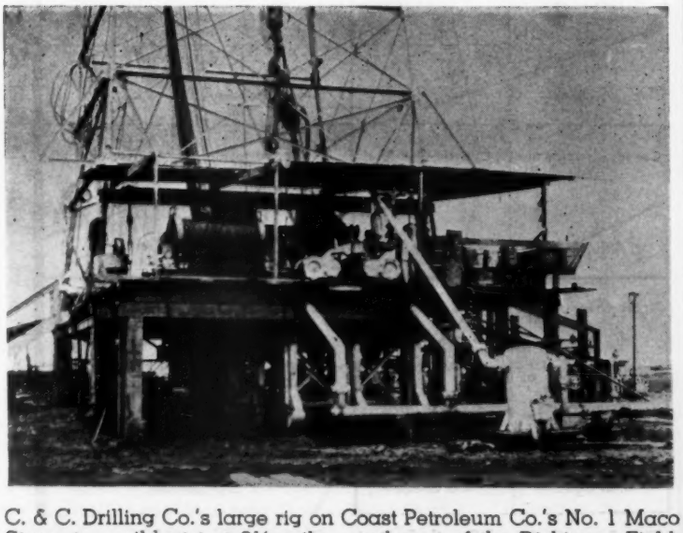
Turnbull and Irwin are drilling below 3,700 feet on No. 1 Blakely Winston on the Danbury Dome in Brazoria County. The test is being drilled on "farmed out" acreage held by the Shell Petroleum Corp.

L. W. Capps completed Crown Central Petroleum Co.'s No. 1 Schojovsa in the Placedo Field, Victoria County, for a large gas well with a small amount of distillate at a ttoal depth of 4,775 feet. In Austin County he is drilling below the surface casing on a wildcat test for Jack Porter; is ready to spud a wildcat test north of Cleveland in Liberty County for Mayo & Peveto and has the rig up for a wildcat test for the Mid-Tex Oil Co. in the Willis area in Montgomery County.

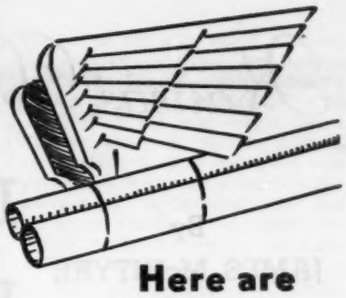
H. J. Porter is drilling below 4,774 feet on E. L. Smith Co.'s No. 1 Lela in the Placedo Field, Victoria County, and is rigged up to drill No. 3 Windsor for Windsor Oil Co. in the Sam Fordyce Field, Hidalgo County.

Glenn H. McCarthy, one of the Gulf Coast's youngest drilling contractors, with a total of nine contract holes to his credit since he entered the business, graduated from the contracting business last week when he cored 128 feet of saturated sand in a well for McCarthy & Mason in the Anahuac Field, Chambers County, from 6,926 to 7,054 feet. Well is on a 976-acre tract held by McCarthy and R. A. Mason. Seven-inch 28-pound pipe will be run at once, and the well completed. It is approximately 1¾ miles north and west of the nearest Humble Oil Co. producer. McCarthy plans to drill the property with his own rigs.

William L. Massey, assistant to Gordon Griffin, chief engineer of the Oil and Gas Division of the Texas State Railroad Commission, with headquarters at Houston, has been appointed deputy supervisor in charge of Southwest Texas. The district offices at Corpus Christi and Refugio have been placed under the San Antonio office. Mr. Massey succeeds J. L. Martin, transferred to Austin. Don Martin, recent graduate of the engineering department of Texas A. & M. College, has been appointed engineer.



C. & C. Drilling Co.'s large rig on Coast Petroleum Co.'s No. 1 Maco Stewart, a wildcat test 2½ miles southwest of the Dickinson Field, Galveston County, which showed for a large gas well when tested through perforated casing from 8,510-35 feet. Total depth is 8,543 feet



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Kansas Developments

By JAMES McINTYRE

DRY HOLE LIMITS LORRAINE POOL NORTH; 23 RICH WELLS

In the midst of the effort to curtail Kansas, Oklahoma and Texas production and thus stave off any possibility of a reduction in the price of crude in the near future, Kansas operators almost equaled the State's all-time daily production record in the past week with an average crude oil output of 153,050 bbls. per day. The increase of 3,225 bbls. did not come from any one field. It was distributed pretty uniformly through the flush and semiflush pools of the State.

Three wells were completed in Russell County, but nine others were in the near completion stage, and all of them good producers. The Lorraine Pool in Ellsworth County added three new ones. Rice, McPherson, Harvey, Reno, Barton, Sedgwick and Pratt Counties all added new wells.

Kansas Production

Estimated daily average production of Kansas for the week ending July 27 and for preceding week follows:

	Barrels	
	July 27	July 20
Burrton	22,325	23,575
Ritz-Canton	7,500	7,200
Hollow	4,650	4,050
Voshell	5,025	4,475
Johnson	1,150	1,008
Nikkel	3,550	3,475
Sedgwick County	7,925	7,875
Ellsworth County	7,806	7,385
Barton County	2,335	2,260
Rice County:		
Chase Pool	17,900	17,250
Remainder	9,150	8,400
Ellis County	462	485
Kingman County	798	670
Stafford	2,276	1,625
Russell County	14,725	13,700
Greenwood County	10,800	10,800
Butler County	18,900	18,550
Other pools	15,773	17,039
Total Kansas	153,050	149,825

Clay County

A wildcat in Clay County was dry and abandoned. It was Seidel Brothers' No. 1 R. Younken, C S half SE NW Section 21-9-4. Back in April it was reported to have had a hole full of oil from a Mississippi lime pay at 1,772-77 feet, total depth 1,782 feet. It was not acidized until the latter part of May but was not productive, and was plugged back to 1,773 feet to get a water shutoff. Recently it was reacidized and a hole full of water resulted.

Russell County

Taree wells were completed in Russell County in the past week.

Central Petroleum Co.'s No. 2 Dortland C, SE NE NW Section 3-14-15w, made a potential production of 183 bbls., producing from Oswald lime at 3,042-57 feet.

Stanolind Oil & Gas Co.'s No. 16 Benso, SE NW SW Section 4-14-15w, made a potential production of 375 bbls. of oil and 65 bbls. of water producing from Oswald lime at 3,062 feet, total depth at 3,070 feet.

Skelly Oil Co.'s No. 2 Opdyke, NW cor. Section 32-14-13w, produced 1,269 bbls. in 24 hours in a potential test from sand at 3,129-30 feet. Oswald was topped at 2,844 feet.

Only one new operation was started during the week. F. Finney and others' No. 1 Chenoweth, SW SW SW Section 10-15-13w, a wildcat, for which cellar was dug.

Hartman & Blair's No. 1 Blair, 330 feet north and 1,570 feet west of SE cor. Section 35-13-15w, in the Dillner Pool, had Siliceous lime at 3,310-15 feet. It pumped 20 bbls. in 5 hours and 20 minutes.

Buffalo Oil Co.'s No. 6 Schaffer-Anschutz, NW SW SW Section 27-13-14w, Russell Pool, swabbed 11 bbls. of oil per hour, with some salt water, from Oswald pay at 3,030-40 feet, top of the Oswald 2,994 feet.

J. M. McMorrow's No. 1 Atherton, NW NW NE Section 30-13-14w, had Siliceous lime at 3,281-89½ feet, and oil rose in the hole 3,000 feet. It pumped 274 bbls. of 34.8 gravity oil and was then acidized.

Gypsy Oil Co.'s No. 1 Ehrlich, SW SW NW Section 1-14-15w, Sullivan Pool, swabbed 153 bbls. in four hours from Tokio lime at 2,518-23 feet. Gypsy Oil Co.'s No. 2 Pierce, NW NW SE Section 2-14-15w, had Oswald at 3,056 feet, set pipe at 3,059 feet and drilled to 3,081 feet. It was acidized and pumped 785 bbls. in 19 hours. Central Petroleum Co.'s No. 1 Foster, SW SW NW Section 3-14-15w, pumped 200 bbls. of oil and some water from Oswald lime topped at 3,039 feet, oil at 3,063-67 feet, total depth 3,081 feet. It was then acidized but not yet tested.

Stanolind Oil & Gas Co.'s No. 1 Baxter, NE NE NW Section 3-14-15w, Gorham Pool, pumped 60 bbls. of oil from Oswald lime at 3,058 to 3,078 feet, in three streaks of pay, total depth 3,094 feet.

J. C. Shaffer, Inc.'s No. 1 Cram, NE NE SE Section 11-14-15w, had Siliceous lime at 3,298-3,305 feet, but water broke in in such quantity that it was plugged back to 3,130 feet and Oswald lime tested. The well pumped 290 bbls. of fluid in 18 hours, 25 per cent water. Oswald lime lay from 3,025 to 3,074 feet.

Russell Oil Corp.'s No. 3 Miller, SE SW SE Section 30-14-13w, Hall Pool, pumped 520 bbls. in 24 hours from Oswald lime at 2,877-2,975 feet. It was then given a 2,000-gallon acid treatment, after which it pumped 725 bbls. in 24 hours.

J. J. Hall and others' No. 2 Miller, NE cor. Section 31-14-13w, was plugged back from 3,164 to 3,157 feet. It swabbed 6 bbls. of fluid per hour, 50 per cent water, and was again plugged back to 3,156 feet. It was acidized and produced 210 bbls. of oil and 90 bbls. of water in 24 hours.

Rush County

Boyle & Grosman's test, No. 1 Yost, C SW SW Section 23-17-18w, Rush County, was dry and abandoned at 3,759 feet. It topped Granite Wash at 2,700 feet and had a hole full of water at 3,719-22 feet.

Ellsworth County

Three completed oil wells were added to the Lorraine Pool making 24 in all, and they averaged 1,749 bbls. each on their potential tests.

Empire Oil & Refining Co.'s No. 6 Rolfs, NE cor. Section 14-17-9w, had Siliceous lime at 3,209-12 feet and made 1,843 bbls. of oil and 167 bbls. of water in 24 hours.

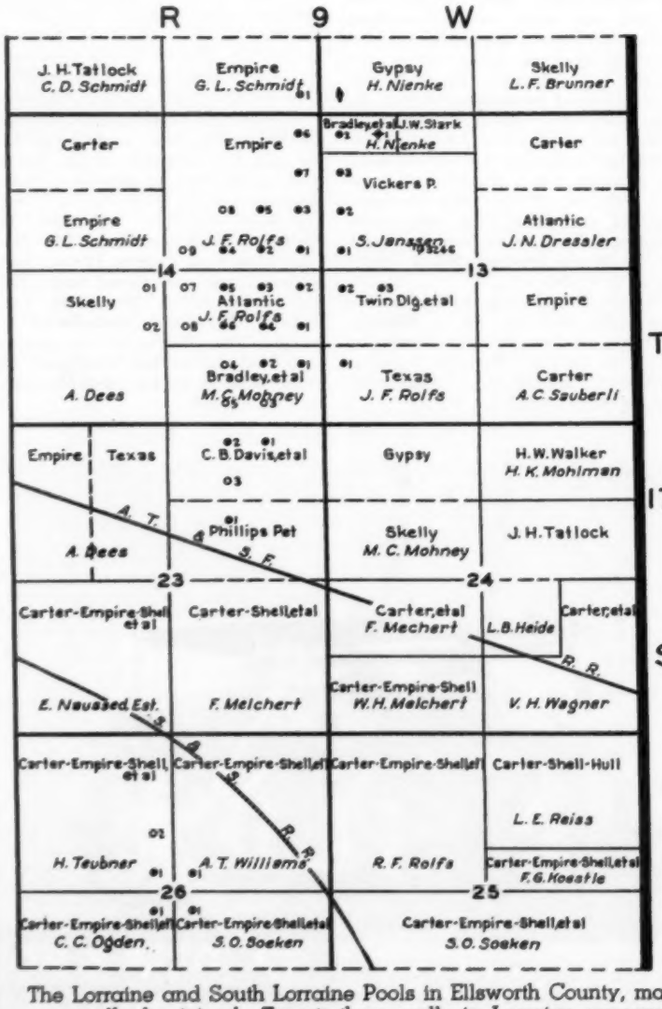
Empire Oil & Refining Co.'s No. 7 Rolfs, SE NE NE Section 14-17-9w, was good for 1,884 bbls. potentially, and did not show any water, producing from Siliceous lime at 3,187-90.

D. Davis, Winkler & Koch's No. 2 Melchert, NE NW NE Section 23-17-9w, made 1,519 bbls. of oil on its potential test, and no water, producing from Siliceous lime at 3,183-95 feet.

In the Ploog Pool, Shell Petroleum Corp. and others' No. 1 Haxton, 350 feet north and 440 feet west of C Section 33-18-9w, produced 822 bbls. in 16½ hours, producing from Siliceous lime at 3,226-30 feet. Same companies' No. 5 Ploog C-16 produced 1,065 bbls. in 24 hours, together with 20 bbls. of water, from Siliceous lime at 3,220-23 feet. Both were completed.

Skelly Oil Co. had cellar dug for No. 2 Dees, SE SE SW Section 14-17-9w, in the Lorraine Pool, and Shell Petroleum Corp. and others had rig up for No. 6 Ploog C-16, NE cor. SW SW NE Section 33-18-9w, Ploog Pool.

Gypsy Oil Co.'s No. 1 Nienke, 271 feet north and 330 feet east of SW cor. Section 12-17-9w, cuts off production in the Lorraine Pool in Ellsworth County to the north. It was a



The Lorraine and South Lorraine Pools in Ellsworth County, may eventually be joined. Twenty-three wells in Lorraine averaged 1,430 bbls. per well initial production

hole full of water with a showing of oil in Siliceous lime at 3,230-32 feet, and pipe was being pulled on Saturday. The Lorraine Pool is one of the richest of the past year's crop of Siliceous lime pools. It was opened in November, 1934, by the Twin Drilling Co. and others in SW NW SW Section 13-17-9w, with a 526-bbl. initial producer from Siliceous lime at 3,200-05 feet. Since that time a couple dozen of wells have been completed in the pool, ranging from 800 bbls. to 2,000 bbls. initial production, and averaging 1,435 bbls. per well, and the pool is now producing 4,925 bbls. per day on a tight curtailment schedule. The Gypsy Oil Co.'s test is the second failure in the deep pay, the other dry hole, in SW SE NW Section 13-17-9w, having been bottomed at 3,246 feet. The Teubner Pool, also called South Lorraine, south of the main body of the Lorraine Pool, may eventually be joined with Lorraine. The Empire Oil & Refining Co.'s 1 Schmidt, SE cor. Section 11-17-9w, offsetting the Gypsy's dry hole in Section 12, had a fishing job at 2,660 feet. It may tell a different story from that of the Gypsy's well and its results are awaited with interest.

Rice County

Empire Oil & Refining Co.'s No. 1 Habiger, SE SE NE Section 20-19-9w, in the Beyer Pool, made a potential of 1,503 bbls. of oil and salt water from Siliceous lime at 3,238-57 feet and was completed.

Empire Oil & Refining Co.'s No. 3 Proffitt, SW NW SE Section 8-20-9w, in the Chase Pool, was completed. It produced no oil at a total depth of 3,617 feet and will be used as a water disposal well. It took 200 bbls. of water in three and one-half hours. Siliceous lime at 3,285-3,304½ feet showed only water. Same company's No. 6 Proffitt made a potential production of 1,393 bbls. of oil in 17 hours and no water, from Siliceous lime at 3,247-54 feet and was completed. Sinclair Prairie Oil Co.'s No. 3 Sharp, SW NW NE Section 7-20-9w, was completed in Siliceous lime pay at 3,273-77 feet and produced 148 bbls. of oil and 47 bbls. of water in 24 hours.

Gypsy Oil Co. was building rig for No. 1 Stoltz, SE SE NW Section 32-19-10w. Sinclair Prairie Oil Co. had rig up for No. 7 Volkland, NE SW SE Section 20-19-9w. Saco Oil Co. and Gypsy Oil Co.'s No. 1 Foote, NW SE NE Section 7-20-9w, is a rig. Hipple and Rogers were rigging up No. 3 Rainet, NW SE SE Section 3-21-6w.

John Burton and others' No. 1 Wendel, SW SW NE Section 32-19-10w, swabbed 61 bbls. the first hour and 46 bbls. the second hour, 1,200 feet of bottom, producing from Siliceous lime at 3,291-93 feet.

Magnolia Petroleum Co.'s No. 5 Beyers, NW SW NW Section 21-18-9w, has Siliceous lime pay at 3,242-52 feet, total depth 3,254 feet. It pumped 76 bbls. of oil and 46 bbls. of water in 24 hours.

Shell Petroleum Corp.'s No. 5 Tournear, NW SW SE Section 29-19-9w, was a hole full of water at 3,340 feet, total depth, and was shut down. It topped Siliceous lime at 3,228 feet.

McPherson County

In the McPherson Pool, McPherson County, Tom Palmer's No. 3 Lundberg, SW NW NE Section 30-18-2w, was completed. It is good for 34 bbls. of oil and 5 bbls. of water per day in a four-day test, producing from Kansas City lime at 2,288-2,311.

Roth & Faurot's No. 2 Carlson, NW NW NE Section 24-19-3w, Chindberg Pool, was completed in Chat at 2,965-96 feet. It was acidized and made 101 bbls. of oil and 6 bbls. of water in 24 hours.

In the Ritz-Canton Pool, Kanokla Oil & Gas Co.'s No. 3 Griffin, SE SW SW Section 14-19-2w, pumped and flowed 594 bbls. in 24 hours at a total depth of 2,976 feet, to which point it had been plugged back from 3,458 feet. It was an old well, total depth 3,381 feet, which had first been deepened and then plugged back to Chat. It was completed.

Cellar had been dug for Mead Production Co. and others' No. 1-A Benson, NW NW SW Section 32-18-2w. Shell Petroleum Corp. was moving in material for No. 5 Fleming, SE SE NW Section 11-19-2w.

Harvey County

Shell Petroleum Corp.'s No. 1 Voth, SW cor. NW Section 4-22-3w, in the Harvey County side of the Nikkell Pool, produced 1,470 bbls. of oil in 48 hours, with 125 bbls. of water, after it had been deepened from its old total depth of 3,509 feet to 3,524½ feet, with the base of the Hunton lime at 3,514 feet. It was completed.

Olson Oil Co. and Shell Petroleum Corp.'s No. 2 Nelson, NE NE NW Section 30-23-3w, was acidized in Chat at 3,270-3,370 feet, and produced 305 bbls. of oil and 50 bbls. of water in 24 hours. It was completed.

Imo Oil & Gas Co., which opened the Sperling Pool in Harvey County, last year found Siliceous lime at 3,505-06 feet in its No. 1 Sperling, SE NE NE Section 23-22-2w, and had 800 feet of water in the hole.

Reno County

Manning, Terry and Reserve Petroleum Co.'s No. 2 Goering, SE NW NE Section 1-23-4w, in the Burrton Pool, Reno County, made a potential production of 442 bbls. of oil and salt water after an acid treatment in Chat at 3,331-58 feet, top of the Chat at 3,258 feet. It was completed.

Gypsy Oil Co. will deepen No. 1 Krehbiel, C NW NE Section 35-23-4w, old total depth 3,326 feet, which was an old gas well with a big gas production. W. C. McBride, Inc., and Derby Oil Co.'s No. 2 Grandon, SW NE NE Section 3-24-4w, was spudding with rotary.

Shell Petroleum Corp.'s No. 1 Danton, C NE NE Section 16-24-4w, had Chat at 3,309 feet and at 3,358 feet had 1,900 feet of fluid in the hole. It swabbed 15 bbls. and flowed four hours, producing 280 bbls. of oil and 45 bbls. water. It was then acidized.

Greenwood County

Shaffer & Howell were drilling at 1,210 feet in No. 16 Schneider, SW SW NW Section 15-23-13, Greenwood County.

Barton County

Gypsy Oil Co. completed No. 1 L. A. Steckel, NE cor. Section 1-20-11w, Barton County. It was acidized in Siliceous lime at 3,268-74 feet and produced 1,139 bbls. in 24 hours. It had pumped as high as 774 bbls. per day before it was acidized. It is in the Steckel Pool.

Butler County

Fairview Oil Co. was drilling at 810 feet in No. 1 Brainerd, SE NE NE Section 3-25-3.

Sanford and others' test on the Cron farm, SE cor. Section 1-28-4, east of the Augusta Pool, in Butler County, was dry and abandoned at 2,281 feet.

Cowley County

I. W. Murfin and R. M. Stewart are building rig for No. 1 Newton, a wildcat, SE SE SE Section 21-30-2, Cowley County.

Barber County

Barbara Oil Co.'s No. 3 Lytle, C SE NE Section 12-33-13w, in the Medicine Lodge gas field, Barber County, is a 4,500,000-foot gas completion, producing from Chat topped at 4,505 feet, total depth 4,573. It had been drilled to Mississippi lime topped at 4,680 feet, total depth 4,699 feet and plugged back and acidized.

Barbara Oil Co. is deepening No. 1 Angell, C NE NE Section 23-33-13w, old total depth 4,506 feet, now drilling below 4,700 feet.

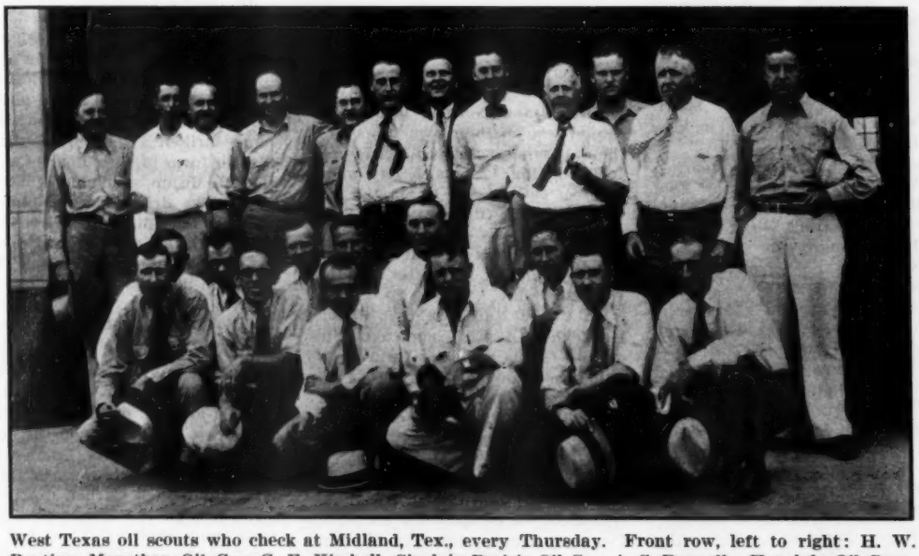
Sedgwick County

Shell Petroleum Corp.'s No. 10 Fisher, 865 feet from the south and 1,055 feet from the west lines of SE ¼ Section 15-26-2e, Greenwich Pool, Sedgwick County, was completed. It was acidized in Viola lime at 3,202-04 feet, and on its potential test produced 339 bbls. of oil and 1,033 bbls. of water.

Pratt and Kingman Counties

On the Pratt County side of the Cunningham Pool, which lies mostly in Kingman County, Skelly Oil Co. completed No. 1 Maxedon, 990 feet from south and 440 feet from east lines of NE ¼ Section 25-27-11w. It made a two-day average of 198 bbls. per day from Kansas City lime at 3,415-59 feet.

Kingman Oil Co.'s wildcat test, No. 1 Wetherell, NE NE SW Section 20-28-10w, Kingman County, was abandoned at 4,612 feet. It had shown only water.



West Texas oil scouts who check at Midland, Tex., every Thursday. Front row, left to right: H. W. Pontius, Marathon Oil Co.; C. F. Kimball, Sinclair Prairie Oil Co.; A. S. Donnelly, Honolulu Oil Corp., Ltd., secretary and treasurer of the Midland Scouts Association; A. W. Wyatt, Atlantic Oil Producing Co., president of the association; O. Black, Phillips Petroleum Co. Second row, kneeling, left to right: J. N. Gregory, Texas University Board; W. F. Brainard, Empire Gas & Fuel Co.; W. P. Blackman, Barnsdall Oil Corp.; C. F. McWilliams, Texas Co.; J. C. Hemphill, Magnolia Petroleum Co. Third row, left to right: J. W. Doss, Republic Production Co.; C. L. Sherwood, Mid-Continent Petroleum Corp.; J. Cornwall, Amerada Petroleum Corp.; F. F. Fulk, Stanolind Oil & Gas Co.; E. M. Cline, Shell Petroleum Corp.; J. B. Leonard, Tide Water Oil Co.; S. S. Stinson, Humble Oil & Refining Co.; F. Turner, Pure Oil Co. Back row, left to right: E. E. Payne, Continental Oil Co.; P. Riley, California Co.; A. J. O'Rourke, Skelly Oil Co.; Col. Harry A. Johnson, Gulf Production Co., and J. J. Russell of the Texas Pacific Coal & Oil Company

Eastern Field Report

By STAFF CORRESPONDENT

RITCHIE COUNTY PRODUCER INCREASES TO 125 BARRELS

PITTSBURGH, Pa., July 29.—There were 27 operations in the lower Eastern fields during the week which resulted in 4 dry holes, 6 gas wells and 17 producers with an initial production of 242 bbls. a day. One well, reported last week as a small producer in West Virginia, was drilled to a second pay and is now rated at 125 bbls. a day. Southeast Ohio continues to lead in new production with 10 of the 11 operations being producers.

SOUTHEAST OHIO

In Belmont County, there were two producers and one dry hole. In the SW ¼ of Section 26, Richland Township, Richland Development Association completed a test on a school lot at a depth of 1,978 feet, the Berea sand, and it produced 25 bbls. the first day after shot. In the NW ¼ of this section, Bee Whitis and others completed No. 5 on the Freiberg and Honsa lease in the same formation at a depth of 1,834 feet. It is good for 10 bbls. a day after shot. In the SE ¼ of the same section, Union Gasoline & Oil Corp. completed drilling the second test on the Gustave Hall farm at a total depth of 1,800 feet through Berea sand and it was dry.

In Coshocton County, Preston Oil Co. completed No. 3 on the Charles D. and Martha F. Mossholder farm in Newcastle Township in the Clinton sand, and it produced 43 bbls. the first day after shot. In Section 17, Perry Township, same county, Murphy Petroleum Co. and others completed No. 3 on the John S. Rine farm in the Clinton sand at a depth of 3,172 feet. It will probably make a 25-bbl. pumper.

In Hocking County, Preston Oil Co. completed No. 1,583 on the Sunday Creek Coal Co. lease in the SE ¼ of Section 6, Ward Township, in the Clinton sand at 3,496 feet. It produced 48 bbls. the first day, natural, and it will not be shot at present. It is about 800 feet south of No. 1,577 on that lease.

In Medina County, Oko Oil & Gas Co. completed No. 13 on the Celestia Richards farm in Section 1, Chatham Township, in the Berea Grit at a depth of 471 feet. It produced 8 bbls. the first day after shot. On Tract 1, Lot 3, same township, E. R. Edson & Son Co. completed No. 32 on the W. H. Wideman farm in this formation at 525 feet. It produced 5 bbls. the first day after shot.

In Monroe County, Jerry Hartline and others completed a test on the William Ady farm in Section 14, Adams Township, in the Injun sand at 1,340 feet. It produced 2 bbls. the first day after shot. In Section 32, Franklin Township, Hines Brothers and others completed a test on the N. L. Hines farm in the Cow Run sand at a depth of 701 feet. It is showing for 5 bbls. a day, natural.

In Washington County, Robert W. Turney and others completed No. 17 on the Myron E. Leasure farm in the SE part of Section 8, Palmer Township, in the Peaker sand at 596 feet. It had only a small showing natural but after shot is making 5 bbls. a day.

SOUTHWEST PENNSYLVANIA

There was one small producer and one fair gas well completed in Southwest Pennsylvania during the week. In North Fayette Township, Allegany County, Smith & Co. completed a test on the Whitmore-Clark lease in the Gordon sand at a depth of 2,257 feet, good for 3 bbls. a day.

In Greene County, B. L. Frye completed a second test on the James Gillett, now B. L. Frye, farm at a total depth of 1,912 feet. The top of the Injun sand was at 1,834 feet, with about 1,300,000 feet of gas a day showing at 1,910 feet. This farm is in Richhill Township.

In Amwell Township, Washington County, Manufacturers Light & Heat Co. is drilling at 1,925 feet in the second test on the R. A. Rankin farm, and on the C. and S. L. Hazlette farm has reached 1,900 feet. Wise Oil & Gas Co. has completed the rig for the second test on the Ensley Kelsey farm, 500 feet northeast of No. 1.

In this township, F. K. Fawcett and others have made a location on the B. A. Bonham farm, which lies between the Anna Phelan and the Tucker heirs farm, both being producers and about 4,000 feet apart. The Tucker heirs well is making about 15 bbls. a day.

Carnegie Natural Gas Co. reached 2,780 feet close to the Thirty Foot sand and shut down to test casing on the R. M. Carrons No. 2 farm in Amwell Township. On the T. N. Shrontz farm, this company shut down for water at 2,415 feet.

In South Franklin Township, Washington County, a local company has made a location on the Pipes farm. The material is being moved in. In East Findley Township, the test of the Natural Gas Co. of West Virginia is still shut down at 2,737 feet on the Wright Ealy farm. The test on the Lucinda Wright farm has not yet been started, but the rig is standing.

In West Bethlehem Township, Washington County, H. D. Freeland and others are spudding on the Winfield McCarty farm, about 2 miles northeast of Marianna. Charles Sanney and others have a rig standing for No. 3 on the Charles T. Harvey farm in East Findley Township.

In Greene County, Peoples Natural Gas Co. is drilling deeper No. 1 on the William King farm in Jefferson Township. It is 1,882 feet deep. In this hole the Pittsburgh Coal is at 877 feet and the top of the Big Injun sand at 1,622 feet. In Washington Township, Equitable Gas Co. is plugging the hole on the Oscar L. Day farm. The total depth was 3,313 feet.

In Richhill Township, Greene County, Carnegie Natural Gas Co. is shut down for water at 1,288 feet on the J. H. Ordoff farm. In this township, Wasmuth and Callahan are also shut down on the Daniel Goodwin farm, and fishing for the bailer at 1,200 feet. H. E. Milliken and others are down 2,550 feet, deepening No. 1 on the Charlotte Smith farm.

WEST VIRGINIA

There were six additional producers completed in West Virginia during the week and one late completion which increased in production considerably and which may draw attention. In Clay district, Ritchie County, Smith and Trainer completed a test on the Martin M. McDougal farm which had about a 3-bbl. production in the upper pay of the Injun sand. From the lower pay it is now reported making about 125 bbls. a day. This location is on the extreme northeast edge of the old Goose Creek Pool and there have been several dry holes drilled just north and east of it.

In Pleasants County, Dye Farm Oil Co. completed No. 3 on the Lavina Dye farm on Schultz Fork in Jefferson district in the Salt sand and it will make about a 1-bbl. pumper.

In Roane County there were four producers completed. In Curtis district, on the waters of Mill Creek, McIntosh and Norman completed a second test on their own property in the Salt sand at a depth of 1,716 feet. It is making 12 bbls. a day and is 300 feet east of No. 1. On the same creek in this district, Kenney M. Hunt and others completed a test on the T. J. Murray 20 acre farm in the Gas sand at 1,295 feet, good for 10 bbls. a day.

On Peniel Run in Curtis district, Henderson Oil Co. completed a test on the C. T. Burdette farm in the Salt sand showing for 8 bbls. a day. On Frozen Camp Run in this district, Clyde W. Campbell and others completed a test on the D. L. Gandee farm in the Salt sand at a depth of 1,649 feet. It is a 7-bbl. producer.

In Taylor County, American Oil Development Co. completed a test on the Pierpoint-Reppart lease in Ellsworth district in the Berea sand at about 2,300 feet. It is reported good for 25 bbls. a day.

In Roane County, on Millers Run of Spring Creek in Spencer district, Virginian Gasoline & Oil Corp. reconditioned No. 2 on the B. A. Hicks farm and more than doubled production. South Penn Oil Co. did the same on the Rawley B. Wright farm on Little Creek in this district.

Gas Wells

In Boone County, O. B. Cunningham and others completed a test on the Dollie Workman farm in Washington district which is showing fair. It was drilled in the Maxon sand at 881 feet and gas showed at 885 feet. It was shut down at 886 feet with over 1,125,000 feet.

In Clay County, F. F. McIntosh completed a second test on the Peabody Coal Co. lease in Pleasant district in the Big Injun sand at a depth of 2,122 feet. It is a small gas well having about 75,000 feet a day.

In Gilmer County, A. E. Ellis and others completed a test on the C. C. Pickens farm in DeKalb district in the Injun sand at a depth of 2,578 feet. It is a gas well with 237,000 feet a day, natural.

In Logan County, Boone County Coal Co. finished No. 3 on their own property in Logan district, which is a continuation of its drilling in Washington district, Boone County. The Big Lime was at 1,945-2,140 feet; the Big Injun at 2,140-99 feet; the Berea sand at 2,648-81 feet with gas showing at 1,992 feet and 2,652 feet It has 253,000 feet a day.

In Monongalia County, Convex Glass Glass Co. completed drilling on the Jesse Bowlby farm in Cass district to a total depth of 2,858 feet through the Bayard sand. It was dry.

In Raleigh County, Godfrey L. Cabot, Inc., completed No. 6 on the Beaver Coal Co. tract in Slab Fork district in the Big Lime at a depth of 3,516 feet. It is a small gas well gauging about 47,000 feet a day.

In Ritchie County, Lucas and Mahaney drilled a test on the E. Blair Martin farm in Clay district through the Big Injun sand and it was dry. It may be drilled deeper. In Burning Springs district, Wirt County, George Dathey drilled No. 6 on the G. W. Righter farm through the Injun sand and it was dry.

Deep Tests Drilling

Another location for a deep test was made in Loudin district, Kanawha County. Godfrey L. Cabot, Inc., made a location on the A. F. Vorholt farm east and north of the test on the Edgewood Realty Co. lease and just west of Charleston. In this district, Columbian Carbon Co. is down 1,716 feet on the Kanawha City Co. lease and Godfrey L. Cabot, Inc., 2,465 on Kanawha Land Co. tract.

In Malden district, Kanawha County, Godfrey L. Cabot, Inc., has reached 3,025 feet on the Pius R. Levi farm and is drilling at 3,900 feet on the Campbells Creek Coal Co. No. 7. Columbia Carbon Co. is at 3,500 feet on W. D. Lewis farm.

In Elk district, Kanawha County, this company is drilling at 4,100 feet on the G. and D. Copenhaver farm. Yoak Oil & Gas Co. resumed drilling the test on the W. T. and J. H. Goshorn farm and reached 4,711 feet.

Benedum and Trees shut down at 4,705 feet on the Mary C. Wingfield farm for casing. In Jefferson district, Kanawha County, this company remains shut down at 5,620 feet for a wire cable and will drill deeper.

Other Drilling Operations

In Cabell County, several new operations have started. In McComas district, Martin and Swanson have started drilling on the Henry Childers farm. W. C. Kingery and others are drilling on the Pratt heirs farm. R. H. Adkins, trustee, has made a location on the J. M. Fellure farm. Toms Creek Gas Co. is rigging up on the C. W. Meelingh farm. Empire State Gas Co. has a location on the Fay Savage farm. R. H. Adkins and others have started drilling No. 4 on the H. S. Fraley farm. West Virginia Gas Co. is down 1,600 feet on the George W. Savage farm. In Guyandotte district, R. J. Petry and others are drilling at 2,000 feet on the Virginia Powell farm.

Calhoun County

In Calhoun County, there are also several new tests. Massey and Jarvis are rigging up on the Hoke Jarvis farm. Harley Jarvis and others have the materials for a second test on the L. H. Crookshank farm. Earl Knotts has started drilling on the H. H. Bennington farm. All are in Washington district. In Lee district, Simmons Gas Co. has a location for No. 2 on the Sylvester Brannon farm. H. S. Adams and others have a rig up on the Ruby Smith farm. Mudlick Oil & Gas Co. is drilling No. 3 on the G. W. Bennington farm.

In Hancock County, R. J. Braden Co. has started drilling No. 20 on the Hewitt heirs farm in Grant district. In Clay district, William Hope & Co. are down 1,200 feet on the Edward Chambers farm.

In Logan County, Southeastern Gas Co. has started drilling on the G. W. Mitchell farm in Logan district and has reached 500 feet. In Lincoln County, H. A. Waggoner, trustee, is drilling at 1,427 feet on the Nettie May farm in Sheridan district. United Fuel Gas Co. is down 1,508 feet on the Vincent Dailey, Carroll district.

Monongalia County

In Monongalia County, Carnegie Natural Gas Co. is down 545 feet on the C. H. Brand farm and shut down at 2,015 feet testing the gas on the Katherine Cooke farm. Both are in Cass district. Gas in Big Injun sand on the Cooke farm is decreasing.

In Ritchie County, no new locations are reported. In Roane County, K. M. Hunt and others have made a location on the A. C. Eagle farm in Curtis district. Here, Henderson Oil Co. started drilling No. 2 on the E. S. Ball farm. In Spencer district, McKown Gas Co. has a location on the Dillon McKown farm. In Harper district, L. C. Young and others have part of the material on the ground on the A. N. Kee farm.

In Tyler County, Victor Tennant has made a location on the Lindsay Lancaster farm in Meade district. In Wetzel County, Chambers Oil & Gas Co. is drilling at 1,000 feet on the Harrison Mellott farm in Center district. The Pittsburgh Coal was at 832 feet. In Wirt County, Service Oil Co. has a rig on the C. C. Menefee farm in Burning Springs district. In this district, Glen W. Roberts has spudded in No. 3 on the W. C. McConaughey farm.

Canadian Fields

Interest Chiefly Centered in South Turner Valley District

By VICTOR LAURISTON

CHATHAM, Ontario, July 27.—In Section 28-18-2w5, South Turner Valley Field, British Dominion Oil & Development Corp.'s No. 4, LSD 6, is drilling into the Madison limestone after cementing casing at 5,853 feet. Renfrew Royalties' No. 1, LSD 3, same section, is cementing 8-inch casing in the Dalhousie sand at 5,540 feet. Light crude production is looked for in the Dalhousie, but drilling will be carried to the porous horizon of the Madison. Farther south, in Section 21-18-2w5, Union-Freehold Oil Corp.'s No. 1, LSD 8, is fishing for 800 feet of lost drill pipe.

In North Central Turner Valley, Dalhousie Oil Co.'s No. 1, LSD 4, Section 18-20-2w5, is fishing at 4,564 feet. In the North Turner Valley Field, Model Oils' No. 3, LSD 1, Section 22-20-3w5, is below 2,200 feet.

Tests in the Foothills

In the Forest Reserve area west of Olds, Hunter Valley Oil Co.'s No. 1 McLaren, LSD 12, Section 13-31-10w5, is in hard formation below 5,000 feet.

On the Rickert structure west of Turner Valley, Paramount Oils' No. 1, LSD 2, Section 28-19-4w5, is below 3,802 feet. East of Turner Valley, New Valley Oil Co.'s No. 1, LSD 4, Section 6-21-2w5, is cleaning out preparatory to deepening from 2,200 feet. Farther south, on the Aldersyde structure, Ranchmen's Gas & Oil Co.'s No. 1, LSD 16, Section 13-20-28w4, is below 6,432 feet, with slightly increased oil and gas shows. On the same structure, Globe Royalties' No. 1, LSD 3, Section 2-20-29w4, is finishing camp buildings.

South of Turner Valley, on the Highwood-Sinclair structure, Maple Leaf Royalties' No. 1, LSD 6, Section 34-17-3w5, struck an increased wet gas flow at 1,850 feet, but had to cement back about 150 feet to overcome caving. It is drilling out cement preparatory to deepening and will utilize the gas flow. Farther south, on the Pekisko structure, Pekisko Hills Co.'s No. 1, is in the Madison lime below 2,643 feet.

Moose Dome Spudded

On Moose Dome, northwest of Turner Valley, Moose Oils' No. 2, LSD 8, Section 29-22-6w5, has spudded. Location is in the same section as Moose Oils' No. 1 but a little south. No. 1 started in the Madison limestone and entered the Devonian at 550 feet. It got three shows of gas in the Madison and six in the Devonian with traces of oil at 2,220 feet, but lost the tools at 2,815 feet when a large gas flow was met. The Moose Dome structure is in the Bragg Creek area about 40 miles due west of Calgary, and is the only known area in the Alberta foothills where the Madison limestone, the producing formation of the Turner Valley Field, outcrops. The company's holdings of 14,000 acres were blocked out some years ago by R. W. Pilling and associates who organized the original Moose Oils, Ltd. The present operations are being financed by Washington, Montana and British Columbia interests headed by E. B. Clarke of Vancouver, president of the reorganized company, who was active in the Salt Creek, Montana and Washington fields. George Lochner of Great Falls is drilling superintendent and other directors are: J. N. Burke, Vancouver; C. Spencer Clark, Seattle; and W. P. Lakin. Doral W. Pilling is secretary and Loran H. Pilling geologist and general manager, representing the original interests in the company. Standard tools and steel derrick are being used, with gas from No. 1 as fuel.

Model Oils, Ltd., of Calgary holds 1,930 acres on the Moose Dome, and will probably start a test after Model Oils' No. 3 in the North Turner Valley Field is finished.

In the old Oil City Field, Waterton Lakes Park, Oil City Royalties' No. 1 is preparing to resume from 2,140 feet. It has a small gas flow and fluid in the hole shows traces of oil and hydrogen sulphide.

Taber Deep Test

A deep test will be drilled by Plains Petroleum, Ltd., in the Taber district of Southern Alberta. Location has been made in LSD 12, Section 25-9-14w4, and a heavy duty rotary outfit used for the Sterling Royalties well is being moved from the Turner Valley Field. Location is on the Thomas Engleston farm, 1½ miles west of Taber. W. E. Allaun of Fort Worth, Tex., managing director, has charge of field operations, assisted by Arthur Mewburn of Calgary. The company holds 5,120 acres on the Majestic structure. The Taber area is about 40 miles east of Lethbridge and was favorably geologized some years ago by Campbell Hunter. The Hunter syndicate put down the Cole-Hunter well in LSD 3, Section 11-10-17w4, later deepened by Alberta Pacific Consolidated Oils, Ltd., to 3,620 feet. It got the Colorado at 820 feet, Blairmore-Kootenay at 2,700 and Sunburst sand at 3,291 feet, with gas in several horizons and an oil sand between 3,310 and 3,317 feet, finishing in the Madison lime at 3,620 feet. Plains Petroleum's No. 1, some miles south and east of the Cole-Hunter test, should get the Sunburst sand a little higher. The company is incorporated under Ontario charter with authorized capital of $500,000 and head office at Toronto. Directors include W. E. Allaun, Fort Worth, Tex.; James E. Whitney, New York City; George M. Bell, Calgary; H. C. Mills, W. George Wright and John A. Huston, Toronto.

On the Del Bonita structure, Terminal Oil Co.'s No. 1, NE Section 18-1-21w4, is drilling out bridge and preparing to cement casing at 4,896 feet.

British Columbia Drilling

In the Sage Creek district, southeastern British Columbia, Columbia Oils' No. 1 is below 3,871 feet in a broken formation with cores showing heavy oil saturation. Gas has been encountered in several sands. Canadian-Kootenay Oil Co. is preparing to deepen its No. 1 in the Flathead Valley from 3,000 feet.

In the Boundary Bay district near Vancouver, Natural Gas Development Corp.'s No. 1 is resuming after setting 10-inch casing at 1,785 feet. A formation at 1,730 feet gave traces of oil and gas. It has logged closely with Boundary Bay Oil Co.'s No. 1 deep test, which got a good gas sand around 2,300 feet.

Saskatchewan Fields

In the Lloydminster Field, western Saskatchewan, Colony Oil & Gas Co.'s No. 1, Section 25-49-27w3, has more than 50,000,000 feet a day open flow. Colony's No. 2 has been spotted on the Morrison farm, a mile southwest of No. 1 and will spud early in August. J. Mesender, who drilled No. 1, will be in charge.

Drilling in Ontario

In the Dover Field, Kent County, Ontario, Prairie Oil & Gas Co.'s No. 5, Vital Duphette farm, SW Lot 2, Concession 4, has spudded and is below 500 feet. East and south of the proven field, E. P. Rowe's No. 1, Bruette farm, Lot 5, Concession 2, has spudded and is below 500 feet.

Gardiner Syndicate is drilling a shallow test for oil on the Town Line near Petrolia.

John Scott, who recently retired as oil well inspector, has been engaged by a Michigan oil group to superintend the rehabilitation of the Stevens (formerly Sheppard) oil property on Highway 21 south of Main Street, Petrolia. It has been off production for a number of years. Five old producers have been cleaned out, from 50 to 100 feet of oil being found in each well. About 25 old wells will be reconditioned, and if satisfactory, more acreage will be secured and several new wells drilled. Fred McIntosh of Pontiac, Mich., is manager.

Well Log Service

By an act of the last Oklahoma Legislature the oil and gas conservation department of the Corporation Commission, Oklahoma City, Okla., was authorized to establish a well log service and credit to the conservation funds all money received from the sale of logs.

This department is now functioning and has available thousands of well logs of Oklahoma oil and gas wells and dry holes. Mimeographed copies of the original logs filed with the oil and gas conservation department each month may be secured upon payment of a charge of $12 per month for one set of logs and $10 per month where more than one subscription is ordered by one company.

A schedule covering special service has been prepared and anyone desiring further information concerning this revived function of the Corporation Commission can secure it by writing to William J. Armstrong, conservation officer, Corporation Commission of Oklahoma, Capitol Building, Oklahoma City, Okla., or to E. G. Dahlgren, chief clerk for this department.

Michigan Field Report

NEW HIGH RECORD OUTPUT IS SET BY MICHIGAN FIELDS

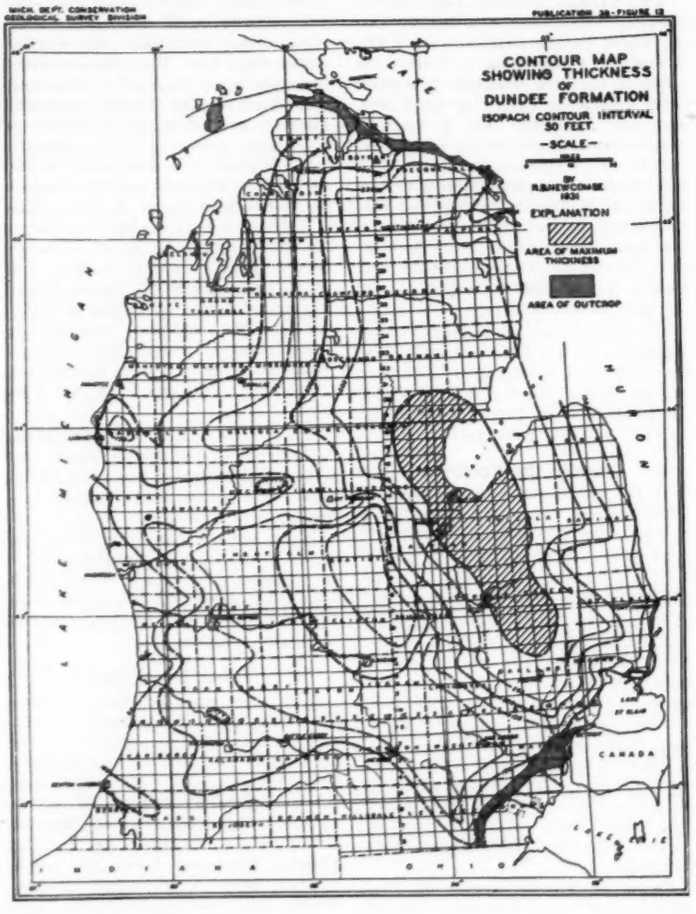
By
PAUL A. ELLIOTT

MUSKEGON, Mich., July 29.—Michigan crude oil production set a new high record averaging 45,982 bbls. daily for the week ended July 20 with the probability that steadily increasing flow from the Crystal Township, Montcalm County Pool would keep the average at 45,000 bbls. or more during the latter days of July.

The daily average for the third week of the month was 4,509 bbls. more than during the immediately preceding week and 2,538 bbls. above the previous record week ending June 22 when an average of 43,444 bbls. daily was maintained.

The Crystal Pool was chiefly responsible for the more than 10 per cent increase over the previous week when it reached a daily total of 10,930 bbls., a strong second to the Porter-Yost Pool of Midland County which produced 27,694 bbls. daily. Crystal's previous record of 8,048 bbls. daily was set during the week ended June 22.

The Greendale-Chippewa Pool, original Mount Pleasant area, retained third place with a daily average of 3,574 bbls., while the Vernon-Leaton Pools of Isabella County were third with 2,169 bbls. Ogemaw County also had a comparatively high average producing 1,273 bbls. daily. Muskegon reported 257 bbls., Saginaw-Lapeer 81 bbls., and Oceana 4 bbls. with no report from Beaverton.



Midland County

The outstanding feature of an otherwise uneventful week in completions was the discovery of a 75 to 100-bbl. well in the upper Traverse formation on a wildcat location in Geneva Township, Isabella County, the Brehm-Hollman Oil Corp.'s No. 1 William Gould, NW SW NE Section 19-15n-2w. Topping the Traverse limestone at 2,978 feet, it was drilled to a total depth of 3,133 feet, or 13 feet below the top of the pay sands encountered at 3,120 feet. It flowed 8 bbls. every two hours by heads for several days.

Traverse was topped 7 feet higher than in the Midland Development Co.'s No. 1 Buck well drilled one location south and one west of the Gould in 1929 by J. C. Arthur. It produced 30 bbls. initial from the Dundee, topped at 3,620 feet and drilled to 3,664 feet, but was plugged and abandoned in the days before acid treatment had been developed to make good wells of otherwise noncommercial tests.

A dry hole was drilled a year ago by Elmer Brehm and John Melvin half a mile south but in the same section, while the United Drillers, Inc. recently finished another "duster" in Section 24 of Denver Township, Isabella County, on the Vandercook lease half a mile southwest at a total depth of 3,674 feet where it was plugged and abandoned.

Greendale-Midland

The Dundee was topped at 3,518 feet in the Hubbell Oil Producing Co.'s No. 1 Mary Jacobs well, NW NE SE Section 9-14n-2w, Greendale Township, Midland County, and 500 feet of oil encountered upon drilling to 3,552 feet with more drilling in contemplation.

Pure's No. 4 Arthur N. Ward, NE SW SE Section 7, Greendale Township, also struck some oil after drilling to 3,560 feet. Deepening and acid treatment were planned before being completed.

Porter-Midland

Pure Oil Co. completed the only other new producer in Midland County in the Porter Township Pool. It was the No. 7 F.-W. Howard, Section 17-13n-1w, with a flow of 50 bbls. initial at 3,421 feet.

Daily potential of Strange & Fortney's No. 9 W. J. Campbell, Section 18, same township, was trebled from 150 bbls. the previous week to 450 bbls. by acid treatment from the Dundee topped at 3,420 feet and completed at 3,385 feet. Richard Hall's No. 4 Harris-Bond, NE NW SE Section 7, also drilled in the week before, had been acid treated but not reopened in time for a gauge after being plugged back a few feet.

A depth of 3,409 feet had been reached without completion in the Carter Lease, Inc.'s No. 7 William Maywood Carter, NE SE SW Section 18, in which the Dundee was topped at 3,393 feet. The contractors expected to deepen it before finishing it this week.

Crystal-Montcalm

Two comparatively small oil producers were completed in the Dundee pay sands in the Crystal Township, Montcalm County, Field where a gas well fire destroyed a rig of the Daily Crude Oil Co. when a flow of about 5,000,000 feet a day was encountered in the Michigan Stray sands at 984 to 990 feet in the No. 1 W. Robbins, SE NE NE Section 3-10n-5w, in Crystal Township. The well is a south offset to the large Dundee oil producer developed by T. F. Caldwell, Inc., on another Robbins lease, NE NE NE Section 3, several weeks ago.

The No. 1 William Strait well, NE SE NW Section 3, same township, was completed with an initial flow of about 100 bbls. a day by heads by the Michigan Producers & Refiners and A. H. Weber, trustee. Traverse was topped at 2,712 feet and the Dundee at 3,180 feet. A show of oil and gas was struck in the Traverse at 2,765 feet and the commercial flow in the Dundee after the well had been drilled to 3,199 feet.

Snowden & McSweeney's No. 2 Wight heirs, NE NW NE Section 2, Crystal Township, also was finished at 3,208 feet, making 50 to 100 bbls. daily pumping and flowing with some water.

Three other Crystal tests were nearing completion this week including J. W. Leonard, trustee's No. 2 Mrs. Ida M. Husted, SW SW SW Section 2; Snowden & McSweeney's No. 3 Wight heirs, SE NE NE Section 10, and Charles Van Keuren, trustee's No. 1 Maud Evans, NE NE NE Section 22.

Other Montcalm Tests

The Golden Oil Co.'s No. 1 Olsen, SE SE SW Section 14-9n-7w, a wildcat in Fairplain Township, Montcalm County, was dry 40 feet in the Dundee lime topped at 3,107 feet and drilled to 3,157 feet.

United Producers & Royalty Co.'s No. 1 Ernest and Martha Conners, SE SW NW Section 26-11n-5w, Ferris-Montcalm, was in the Traverse and expected to complete this week.

Isabella County

Three small oil wells and a gasser were completed in Denver, Isabella and Sherman Townships of Isabella County last week. Chartiers Oil Co.'s No. 2 Edger O. Graham, NW SE SW Section 28-15n-3w, Denver Township, was estimated good for 30 bbls. natural after topping the Dundee at 3,587 feet and drilling to 3,627 feet. It will be treated with acid. The same company's No. 1 Asa Prout, Section 12-15n-4w, Isabella Township, also was estimated as a 50-bbl. well in the Rosebush area topping the Dundee at 3,639 feet and completing at 3,702 feet. No. 1 Rebekah Prout and others of D. W. Null and T. H. Funk, NW NE NE Section 13, same township, also had an estimated flow of 30 bbls. natural at 3,705 feet after reaching the Dundee at 3,556 feet. W. J. Bernier's No. 1 Charles Gatehouse, C NE SW Section 36-15n-6w, Sherman Township, had an open flow capacity of 2,225,000 feet of gas daily after a shot in the Michigan Stray sand first logged at 1,318 feet and drilled to 1,324 feet. It extended the Broomfield-Sherman Field about half a mile.

Three other Isabella tests were

nearing completion in three townships as follows: John F. Melvin's No. 2 Fred DeStoop, NW SE NE Section 2-14n-3w, Chippewa Township; Wittmer Co.'s No. 1 Mike and Rose Hudak, E half SE NE Section 11, Isabella Township, and the McClanahan Oil Co.'s No. 1 McKenzie, C SE SE Section 34-16n-4w, Vernon Township. The Wittmer Co.'s No. 1 A. A. Curtis, C N half NW SE Section 2, Isabella Township, previously drilled into the Dundee and swabbed for 60 bbls., also was testing for an increase.

Ogemaw County

Three tests in three townships of Ogemaw County indicated commercial production in the Dundee and upper Traverse pay sands last week. The most spectacular of the three was the Red-Man Oil Co.'s No. 1 P. Dobig heirs, SW NW SE Section 6-21n-3e, Mills Township, which flowed a barrel a minute from the upper Traverce and was estimated good for 200 to 400 bbls. daily when the casing is reset and water shut off. Gas pressure raised it from its seat blowing cement from the hole.

H. C. Nelson's No. 1 State of Michigan, SE SE SW Section 31-22n-3e, Churchill Township, same county, was good for about 50 bbls. daily at 2,626 feet after topping the Dundee at 2,448 feet.

Muskegon Oil Corp.'s No. 2 Arthur Fisk, NW NW NE Section 29-22n-2e, West Branch Township, same county, swabbed about 2 bbls. an hour after drilling to 2,718 from a Dundee top of 2,539 feet. It will be acid treated.

The Wiser Oil Co. also completed its No. 1 William J. Price, SW NW NW Section 5, Mills Township, as a dry hole at 2,640 feet after topping the Dundee at 2,495 feet. It will be plugged and abandoned after striking no show of oil or gas.

Several other Ogemaw tests also had been drilled in and were treating or were drilling into the Dundee with early completion expected.

Wildcat Developments

Four wildcat tests in widely separated areas in central Michigan were finished as dry holes last week.

The Farwell Oil & Gas Co.'s No. 1 Siegle-Farwell Hills & Elevator test, NW SE SE Section 26-17n-5w, Surrey Township, Clare County, struck bottom water at 3,985 feet after striking no show of oil or gas in the Dundee encountered at 3,887 feet. It will be plugged and abandoned.

Jetter Oil Co.'s No. 1 Daniel Pursley, NE SW SW Section 19-14n-10w, Mecosta Township and county wildcat, struck salt water at 3,435 feet and is being plugged despite shows of gas and oil. Another test may be drilled by the same company in this area on a location about 1¼ miles to the southwest.

Hadley Oil & Gas Syndicate's No. 1 Halpin estate, SE NE SE Section 36-7n-9e, Elba Township, Lapeer County, a southeastern Michigan test, also was plugged and abandoned at a total depth of 2,426 feet.

The fourth duster of the week was the Smith Petroleum Co.'s No. 1 Moser, C NE SE Section 20-17n-10w, Richmond Township, Osceola County, which was a failure at 3,771 feet. It will be abandoned. John B. Northcott also has decided to plug his No. 3 Jane Pinder, SW NE NW Section 31, Elbridge Township, Oceana County, a Traverse oil test drilled to 1,998 feet.

A record total of 35 permits to drill were issued during the week of July 17 to 24 by the State Conservation Department. Montcalm led 10 other counties with 13 locations in six townships including four in Crystal, three in Ferris, the northwest trend of the Crystal Field, two in Bushnell and Belvidere Townships and one each in Cato and Day Townships. Mecosta County was second with five locations in three townships, including three in Millbrook and one each in Hinton and Austin. Activity in these two counties makes them the new development center of the State.

Six permits for tests in three Midland County townships also were issued, however, including four in Porter and one each in Greendale and Mount Haley Townships. Two were for new tests in Birch Run Township, Saginaw County, and one each for projects in Mills Township, Ogemaw County, Heath-Allegan, Beaverton-Gladwin, North Plains-Ionia, Henrietta-Jackson and Alcona-Alcona, mostly wildcats.

The locations were placed under permit as follows: Robert L. Tope's No. 1 J. McFarlane, C NW NE Section 1-15n-4w, Isabella Township-Isabella County; Refiners Petroleum Corp.'s No. 1 Statsick, C NW SW Section 27-13n-7w, Millbrook-Mecosta; Louis Dery and O. S. Fowler's No. 1 Wobig heirs, NW NW NE Section 6-21n-3e, Mills-Ogemaw; Daily Crude Oil Co.'s No. 1 J. Flint, SW SW SE Section 35-11-5w, Ferris-Montcalm; same company's No. 3-A J. Tow, NE SE SE Section 3-10n-5w, Crystal-Montcalm; Jones-Woodruff Oil Co., Inc.'s No. 1 M. Martin, SW SE SE Section 29-11n-6w, Day-Montcalm; Wiser Oil Co.'s No. 1 E. Salisbury, C NW NE Section 3-12n-7w, Belvidere-Montcalm; same company's No. 1 T. Bright, C NE NW Section 4-12n-7w, Belvidere-Montcalm; Hal-Be-Oyle & Gas Corp.'s No. 4 Taggart Brothers, C NW SE Section 3-14n-9w, Austin-Mecosta; Heath Oil Co.'s No. 1 H. Terpstra, NW NE SE Section 34-3n-14w, Heath-Allegan; Henry L. McEvoy's No. 2 S. Demski, SW SW SE Section 28-15n-3w, Denver-Isabella; Petroleum & Gas Development Co., Inc.'s No. 1 Mulvaney, NE SE NE Section 31-1s-1e, Henrietta-Jackson; Charles H. Bell's No. 1 Fatterlee, C SW NE Section 25-13n-8w, Hinton-Mecosta; Gordon Oil Co.'s No. 1 Roberts and others, C SW SW Section 33-13n-7w, Millbrook-Mecosta; Jetter Oil and Lima Oil Corp.'s No. 1 C. N. Long, NW NW SE Section 1-9n-6w, Bushnell-Montcalm; D. W. Null and T. H. Funk's No. 1 J. H. Taylor, NW SW NW Section 18-15n-3w, Denver-Isabella; A. J. Gray's No. 1 Kimball, NE NE SW Section 32-11-5w, Ferris-Montcalm; Pure Oil Co.'s No. 7 Reem, SE NW SE Section 7-14-2w, Greendale-Midland; Pure's No. 2 Preston, SE SE NE Section 3-10n-5w, Crystal-Montcalm; Pure's No. 2 Mangus, SW NW SW Section 2, Crystal; Pure's No. 6 Root, NW SW NW Section 20-13n-1w, Porter-Midland; Pure's No. 7 Root, NE NW NW Section 20, Porter; Pure's No. 2 Miller, SW NE NE Section 18, Porter; Smith Petroleum Co.'s No. 1 Soule and Ackerman, SW NE SE Section 20-10n-6e, Birch Run-Saginaw; same company's No. 1-A Morse, SE SE NW Section 20, Birch Run; Rex Oil & Gas Co.'s No. 1 Newland, NW NW NW Section 2-12n-8w, Cato-Montcalm; W. Hunter Atha's No. 1 Doyle, SE SE SW Section 33-13n-1e, Mount Haley-Midland; Daily Crude Oil Co.'s No. 2 J. Tow, SW NW SW Section 2, Crystal; Gordon Oil Co.'s No. 1 Bank of Muir, NE NE SW Section 30-8n-5w, North Plains-Ionia; Bundy Hill Natural Gas & Oil Co.'s No. 1 Schuberg, C SW NW Section 32-13n-7w, Millbrook-Mecosta; D. W. Sessions' No. 1 J. F. Sessions, SE SW SW Section 2-9n-6w, Bushnell-Montcalm; M. F. Whitehill's No. 1 Charlotte Dell, SE SW SW Section 2-17n-2w, Beaverton-Gladwin; Virgil R. D. Kirkham's No. 1 J. Jozwiak, NW SE NW Section 25-28n-9e, Alcona-Alcona; George G. Hanners' No. 1 Carrie Palmer, SW NW NW Section 22-11n-5w, Ferris-Montcalm, and Marshall H. Bauman and Milton D. Shine's No. 1 Long, C N half NW NE Section 19-13-1w, Porter-Midland.

Completions and Operations in Pennsylvania-New York Gas Area

By R. C. CONINE

COUDERSPORT, Pa., July 29.—In the north central Pennsylvania and adjacent New York gas fields only one producer was completed in the week ending July 26. This was East Penn Development Co.'s No. 1 Clarence Cooley, Lawrence Township, Tioga County, completed at a total depth of 3,990 feet for a daily output gauge of 310,000 feet. In New York State Godfrey L. Cabot, Inc. got a duster at its No. 1 Roberts, abandoning at 1,565 feet in York Township, Oneida County. This company also abandoned its test on the Hannifan farm, Florence Township, Oneida County, when gas failed to show at 1,712 feet. This leaves only two wells drilling or temporarily shut down in this county where operations have been unusually active for several months.

Pennsylvania Operations

There were no shutdowns in the Pennsylvania division of this gas belt. East Penn Development Co. was drilling at 4,103 feet on the Ray French farm, Clymer Township, Tioga County. The Tully marker was found at 3,820-3,875 feet in this test. Cowanesque Natural Gas Co. was drilling at 5,130 feet on the E. A. Furman farm, Allegany Township, Potter County. Hanley and Bird were drilling at 3,712 feet on the George Burd farm, same township and county. Williamsport Natural Gas Co. was drilling at 4,850 feet on No. 1 Hile-Ellis-Cobb, Genesee Township.

Sylvania Natural Gas Corp. was drilling at 4,610 feet on the Merle A. Hill farm, Genesee Township, Potter County. The Tully in this test was found at 4,525-76 feet. Stocum and others were drilling at 4,430 feet on the L. Thompson farm, same township and county. The top of the Tully in this well was reached at 4,390 feet. Sylvania Natural Gas Corp. got the Tully lime at 5,089 feet, and was bailing water at 5,106 feet in its No. 3 Z. L. James, Allegany Township, Potter County. Wyoga Oil & Gas Co. was drilling at 4,480 feet at its No. 3 Tassel, Hebron Township, same county. Godfrey L. Cabot, Inc. was drilling at 750 feet on the A. G. Lyman farm, Ulysses Township, same county. Same company was drilling at 1,970 feet after setting 618 feet of 8¼-inch pipe in its test on the Robert R. Lewis farm, Allegany Township, Potter County.

United Producers, Inc. was drilling at 3,265 feet on its No. 2 Katherine Currier, Allegany Township, Potter County. Penn York Natural Gas Co. was drilling at 2,030 feet on the William Cobb farm, same township and county. Potter Development Co. was drilling at 1,930 feet on the F. Robbins farm, Bingham Township, same county. New York State Natural Gas Co. was drilling at 1,111 feet on the A. Bishop farm, Allegany Township, same county. Sylvania Natural Gas Corp. was spudding in its No. 4 Z. L. James, same township and county. In South Union Township, Fayette County, William Snee and others were still shut down at 3,961 feet on their deep test on the Summit Hotel property. There was one new location. Penn United was digging cellar on the Chauncey Wainwright farm, Lawrence Township, Tioga County.

New York Operations

Five wells are drilling and four are shut down in the New York sector of the gas belt. Preparations are nearing completion on three additional tests. Trumbull and others are shut down at 1,000 feet on the W. B. Lasher farm, Throop Township, Cayuga County. Southwestern Natural Gas Co. was drilling at 4,045 feet on the T. Moran farm, Alma Township, Allegany County. The Tully lime was found at 3,842-90 feet in this test. Cunningham Natural Gas Co. was drilling at 4,460 feet on the Colligan farm, same township and county. Belmont Quadrangle Development Co. was drilling at 4,457 feet on the Van-Copen & Whiteman farm, Willing Township, same county. The Tully in this test was found at 4,152 feet and the drill is still in this formation.

Schrack and others were drilling at 2,608 feet on the M. M. Loring farm, Willing Township, Allegany County. Sanderson and others were shut down at 3,186 feet on the Leon Bennett farm, Granger Township, same county. Wyoming Natural Gas Co. was shut down at 1,783 feet on the C. H. Caulling farm, York Township, Livingston County. Rome Syndicate was shut down on the Meaker farm, York Township, Oneida County, at 1,245 feet. Hanley and Bird were rigging up on the M. Ackley farm, Greenwood Township, Steuben County. Property Shares, Inc. was spudding at 60 feet on the No. 2 Owens, Camden Township, Oneida County. There were two new locations. Godfrey L. Cabot, Inc. was building a rig on the Alice Cunningham farm, Willing Township, Allegany County. The same company was digging a cellar for a test on the Dora Barber farm, same township.

Oklahoma Operations

By JAMES McINTYRE

COMMISSION WILL ORDER CUT IN OKLAHOMA CRUDE OUTPUT

In line with the three-state plan to curtail production the Oklahoma Corporation Commission announced on Friday that it would, in a few days, issue an order reducing the production of Oklahoma 7½ per cent under the July quota of 517,400 bbls., which would bring the August production allowable production down to 478,595 bbls., a cut of 38,805 bbls. per day. The action came 24 hours after the allocation committee of Oklahoma oil producers had recommended the cut in output in order to stabilize the market. The general plan is to curb overproduction in Kansas, Oklahoma and Texas.

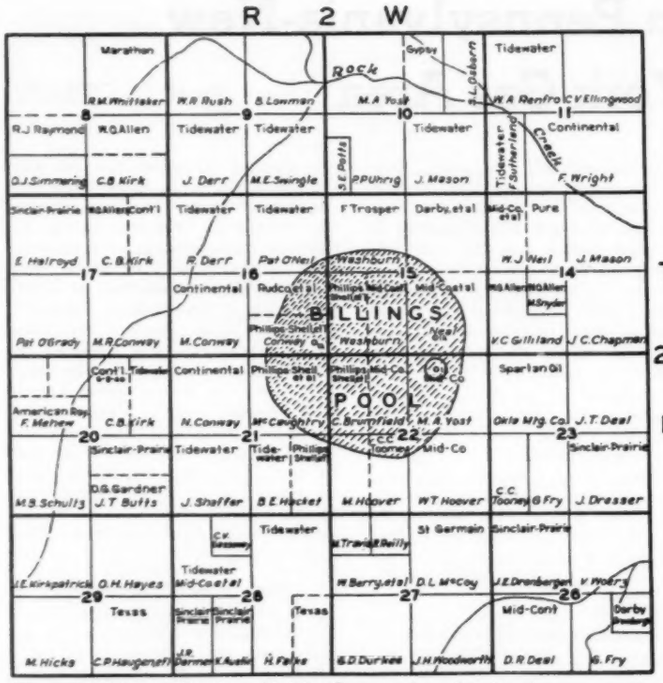
The commission's statement said:

"Responding to the unanimous request of authorized representatives of the oil industry, the Corporation Commission, in an order to be issued within a few days, will reduce the August oil allowable in Oklahoma 7½ per cent below the total production authorized for July. It is our understanding that other oil producing states in this territory have, or will, soon take similar action. The reduction will amount to 25,000 bbls. per day in Oklahoma.

"This action is necessary in view of existing conditions to save the oil industry, not only in Oklahoma, but throughout the nation, from an impending weakened condition and to conserve the supply.

"At present, production is in excess of market demands. Such a situation, of course, is economically unsound and contrary in every way to our conservation program. When that occurs, waste and financial loss are inevitable. Our action is taken solely in the interest of the conservation of our oil supply and to preserve the industry in a healthy economic condition.

"The Oklahoma Commission is always willing to co-operate with other oil producing states in any program having for its objective the protection of the oil industry, since it means so much to the State of Oklahoma and to thousands of its citizens."



The old Billings Pool in Noble County has lately shown good production in the Simpson and Arbuckle formations

The Billings Pool

While the Billings Pool, in northern Noble County, is expected by many to prove a prolific source of Simpson sand and Arbuckle lime oil production, the deep sand discovery well has been cutting capers that have made it difficult to get a true line on the field. The Midco Petroleum Corp., headed by Charles C. Toomey, well known geologist, drilled on one of its old upper-sand leases, the Yost farm, starting the well in NE NW NE Section 15-23-2w, and got a production as high as 1,600 bbls. in 12 hours from Arbuckle lime. The well was drilled to 4,257 feet and an ocean of water appeared. The hole was plugged back to 4,215 feet with cement and then drilled to 4,245 feet where it flowed by heads for 16 hours producing 550 bbls. of oil with no water reported.

Some operators believe this oil came from Simpson sand, but a Midco official believes it is Arbuckle lime oil. The company started a north offset to the discovery well, No. 1-A Neal, 800 feet from west line and 400 feet from south line of SE¼ Section 15, and this well has reached a depth of 4,117 feet where pipe has been set and cemented. No. 1-A Neal showed oil through the mud. It will be completed with cable tools and the Simpson series will be carefully tested, which was not done in No. 1 Yost.

The Phillips Petroleum Co. and Shell Petroleum Corp. are partners in the deep sand rights on 420 acres west of the discovery well and Tide Water Oil Co. recently went into the field and secured protective acreage. Phillips and Shell have a well drilling, No. 1-A Conway, SE SE SE Section 16, and it had reached a depth of 3,575 feet and was drilling in shale.

The results of the two drilling wells will be awaited with great interest as some operators are of the opinion the Midco has opened another important field.

Pontotoc County

H. & M. Drilling Co.'s No. 1 Whitley, SW SE NW Section 8-4-8, North Steedman Pool, Pontotoc County, was dry and abandoned at 2,616 feet.

In the Fitts Pool, six wells were completed.

Louall Drilling Co.'s No. 4 Craddock, 1,030 feet south and 290 feet west of NE cor. Section 25-2-6, had Bromide at 4,223 feet, sands at 4,325-50 and 4,394-4,405 feet, total depth, and flowed 669 bbls. in six hours through tubing and 185 bbls. in one hour through casing.

Phillips Petroleum Co.'s No. 13 Norris, SW NW SW Section 25-2-6, had Bromide at 4,090 feet, sands at 4,195 and 4,265 feet, total depth 4,282 feet. It flowed 1,110 bbls. the first hour through casing and 196 bbls. the second hour through tubing, with gas at the rate of 13,000,000 feet per day.

Stanolind Oil & Gas Co.'s No. 2 Norris-A, SW NE SE Section 26-2-6, had Bromide at 4,220 feet, sands at 4,304 and 4,372 feet, total depth 4,397 feet. It flowed 466 bbls. the first hour and 362 bbls. the second through casing, 157 bbls. third hour and 149 bbls. fourth, through casing.

Stanolind Oil & Gas Co.'s No. 3 Norris-A, NE NE SE Section 26-2-6, had Bromide at 4,150 feet, sands at 4,240 and 4,320 feet, total depth 4,346 feet. It flowed 224 bbls. first two hours through tubing, 483 bbls. following two hours through casing.

Moore and others' No. 8 Akers, NW SW NE Section 36-2-6, had Bromide at 4,255 feet, sands at 4,365 and 4,436 feet, total depth 4,462 feet, and flowed 2,011 bbls. in five hours through casing.

Moore and others' No. 2 Atkins, NE NW NW Section 32-2-7, had Bromide at 3,808 feet, sands at 3,900 and 3,975 feet, McLish at 4,030-35 feet, total depth. It produced 242 bbls. in one hour through casing, with gas at the rate of 14,000,000 feet per day. It was a Bromide sand producer.

Oklahoma Production

Estimated daily average production of Oklahoma for the week ending July 27 and for the preceding week is as follows:

	Barrels	
	July 27	July 20
Allen	7,800	7,725
Asher-West Asher	1,300	1,300
Burbank	8,500	8,500
South Burbank	11,250	11,250
Balance Osage	26,750	26,750
Blackwell	4,775	4,775
Bristow-Slick	9,150	9,000
Chandler	4,600	5,000
Crescent	3,650	6,450
Cromwell	4,325	4,300
Cushing-Shamrock	13,500	13,200
Duncan district	4,200	4,200
Edmond	4,750	4,525
Fish	10,125	10,550
Fitts	25,525	10,050
Gray	1,875	1,925
Graham	4,250	4,250
Healdton	9,600	9,600
Hewitt	4,825	4,825
Holdenville	1,525	1,625
Keokuk	2,050	775
Konawa	1,875	2,400
Lucien	12,000	10,150
Marshall-Lovell	1,050	1,050
Oklahoma City	152,325	158,350
Papoose	1,200	1,225
Polo	3,850	2,600
Sasakwa and townsite	2,425	2,600
Sholem Alechem	4,025	4,000
Seminole Field:		
Bowlegs	11,375	11,500
Carr City	6,150	6,600
Earlsboro	10,150	9,775
East Earlsboro	10,925	10,900
South Earlsboro	1,225	1,200
Little River	14,525	14,275
East Little River	950	825
Maud	1,100	1,125
Mission	3,250	3,250
Seminole	12,225	11,725
East Seminole	1,575	1,450
Searight	4,500	3,475
Total Seminole	77,950	76,100
St. Louis-Pearson	26,075	26,300
Tatums	4,800	4,825
Tonkawa-Garber-Thomas	5,750	5,800
Wewoka	3,550	3,550
Yale-Jennings	5,100	5,100
Other pools	57,650	57,625
Total Oklahoma	523,950	522,250

New work in the Fitts Pool included Carter Oil Co.'s No. 2 G. F. Smith, NW NW SW Section 28-2-7, location; same company's No. 3 G. F. Smith, location; Carter Oil Co. and Skelly Oil Co.'s No. 1 Z. K. McKoy, NW NW NW Section 33-2-7e, location; all three wells to be drilled into the McLish to test that formation for production.

Stanolind Oil & Gas Co.'s No. 2 Norris, SE SW SE Section 25-2-6, an old well plugged back from 4,315 feet to 4,258 feet, flowed 56 bbls. in one hour through casing, and 110 bbls. the next 40 minutes through casing.

Moore and others' No. 3 Patrick, SW NW NE Section 31-2-7, had Bromide at 3,880 feet, sands at 3,985 and 4,025 feet and McLish at 4,097-4,105 feet, total depth. It flowed 170 bbls. in one hour through tubing and was then shut in.

Moore and others' No. 7 Smith, SW NE NW Section 31-2-7, had Bromide at 3,945 feet, first sand at 4,060 feet and McLish at 4,160 and 4,267 feet,

and with the drill pipe in the hole the well flowed 512 bbls. in five hours. It was deepened to 4,270 feet and flowed 348 bbls. in one hour. Sand was found at 4,270-85 feet and at 4,345-95 feet and the hole was bottomed at 4,402 feet. It had not been completed. The same owners' No. 8 Smith, SE NE NW Section 31-2-7, is at a total depth of 4,403 feet with the top of the McLish at 4,157 feet. It flowed 45 bbls. per hour at 4,157 feet; 132 bbls. per hour at 4,240 feet, and 197 bbls. hourly at 4,403 feet.

The Magnolia Petroleum Co.'s No. 3 Simpson, SE SE NE Section 29-2-7, in the Fitts Pool, staged a sensational performance on Saturday afternoon when it blew in for 100,000,000 feet of gas per day blowing the heavy mud out of the hole while drilling was in progress. The crew fortunately escaped injury. It was drilling in the McAlister sand at 1,286 feet when the gas was uncovered.

Magnolia Petroleum Co. deepened No. 6 Shaffer, NW SE NW Section 25-2-6, from 4,380 feet to 4,400 feet and got an increased production. It flowed 204 bbls. the first hour and 210 bbls. the second.

Moore and others' No. 1 Adkins, SW NW NW Section 32-2-7, had McLish at 4,080 feet and second McLish at 4,210 feet and made 106 bbls. the first hour and 125 bbls. the second hour through the Hydril. It will be deepened to the Arbuckle.

Seminole County

Texas Co.'s No. 8 Janey, 330 feet south and 380 feet west of C Section 11-7-6, Seminole County, was completed as a gas well in Booch sand at 3,130-61 feet. It made 26,275,000 feet, with a 675-pound casing pressure.

Gypsy Oil Co.'s No. 3 Grayson, NE SW NW Section 13-6-5, was abandoned at 3,478 feet, the crew having "lost" the hole and No. 3-A was started 75 feet south of No. 3 and had pipe set at 102 feet. Magnolia Petroleum Co. made a location for No. 2 Diamond, 990 feet from south and 810 feet from west lines of NW¼ Section 8-6-8.

Mid-Continent Petroleum Corp.'s No. 3 Gassoway, SW SE NE Section 14-6-5, in the Grayson Pool, had Dolomite at 3,771 feet, total depth 3,816 feet. It swabbed 351 bbls. in eight hours and was then treated with acid.

Paul Traugh and others' No. 1 Lowry, NE SE NE Section 30-6-5, a wildcat, had 1,300 feet of oil in the hole from sand at 2,446-61 feet and was shut in for tankage.

Champlin Refining Co.'s No. 9 See, 990 feet from east and 280 feet from north line of SE¼ Section 30-7-8, had Dolomite pay at 4,122-26 feet but drilled to Wilcox sand at 4,169-71 feet, total depth. It flowed 30 bbls. an hour from Dolomite. It will be treated with acid.

Stanolind Oil & Gas Co. deepened No. 2 Starkey-B, NW NW SE Section 31-7-8, in the Wilcox sand part of the Fish Pool. It was drilled from 4,214 feet to 4,234 feet but the production, 138 bbls. in 24 hours, was no increase.

Texas Co.'s No. 1 M. R. Keaton, NW NW SW Section 4-8-10, in Hughes County, a wildcat, was shot with 25 quarts at 3,740-3,820 feet and gauged 1,860,000 feet of gas. It was plugged back to 3,780 feet and shot with 40 quarts at 3,740-80 feet. It was then deepened to 3,915 feet and 5-inch casing was to be run. This test had dry Wilcox sand at 4,062-79 feet and has since been testing the upper horizons.

In the Olympic Pool, the Olympic Oil Co.'s No. 1 Dixon, NE SW NW Section 12-9-8, which found only water in the Wilcox sand at 4,277-79 feet and was plugged back to 1,739 feet, and shot with 100 quarts at 1,690-1,735 feet, flowed 400 bbls. of fluid, half oil and half water, together with about 15,000,000 feet of gas. Later it flowed 150 bbls. of oil in 18 hours, cut 15 per cent. It had not been completed.

Pottawatomie County

American Bond & Investment Co.'s No. 1 Motley, C SW SE Section 10-7-3, Pottawatomie County, was treated with acid in Hunton lime topped at 4,463 feet, total depth 4,700 feet. It swabbed 126 net bbls. of oil in 48 hours, and was completed.

Anderson & Kerr's No. 1 Duvall, SE NW SW Section 3-7-4, St. Louis district, had Hunton lime at 3,755 feet, and drilled to 4,025 feet and plugged back to 4,013 feet. It was acidized and pumped 43 bbls. in 10 hours on its completion test.

Smith & Scott's No. 1-A McGee, SE NW NW Section 3-7-4, was completed in Hunton lime at 3,740-3,915 feet. It was acidized and flowed 433 bbls. in 48 hours.

Springrose Drilling Co.'s No. 1-A Brandenburg, SE NE NE Section 3-7-4, found Simpson Dolomite at 4,098 feet, with pay at 4,119-24 feet, and was completed after it had produced 240 bbls. in 48 hours. It was an old well deepened from 3,940 feet.

Hightower & Hinkle's No. 1-A Sillyman, SE SE NW Section 19-6-4, was dry and abandoned at 3,635 feet.

Logan County

Shell Petroleum Co. plugged back and recompleted two old wells in the Marshall Pool, in Logan County. No. 6 McCulley, NE SW SE Section 30-19-4w,, old total depth 6,173 feet, had casing perforated at 3,900-30 feet and tested Tonkawa sand. On its completion test it produced 240 bbls. in 24 hours through tubing. No. 10 McCulley, NE NW SE Section 30-19-4w, swabbed 35 bbls. of oil per day through tubing from Tonkawa sand at 3,920-60 feet. Old total depth was 6,010 feet. Layton sand at 4,640-90 feet was first tested but there was no showing.

Houghton Royalty Co. abandoned the location for No. 1 Langston townsite, SW SW SE Section 13-17-1w, and Gypsy Oil Co. abandoned the location for No. 1 Faubion, NE NE NW Section 27-15-3w.

Continental Oil Co.'s No. 1 McConnell, C SE SE Section 28-17-4w, in the Crescent Pool, Logan County, old total depth 6,148 feet, and which was deepened to 6,327 feet, at which depth it flowed 2,211 bbls. in 24 hours, which was no increase, was shut in.

Gypsy Oil Co. and Carter Oil Co.'s No. 3 Knowles, SW SW NW Section 34-17-4w, old total depth 6,220 feet, which was drilling deeper to second Wilcox sand at 6,333-37 feet, had to be plugged back to 6,230 feet on account of water. The crew was waiting for cement to set after which it will probably be deepened again as there was an increase in production in the second Wilcox before the water broke in.

Lincoln County

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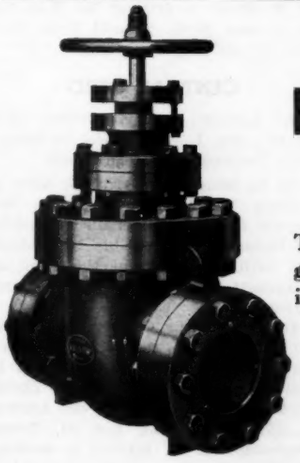

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TROY, NEW YORK

anaugh, SE SE NE Section 31-15-5e, Lincoln County, a wildcat, was abandoned at 4,634½ feet. It had Wilcox sands at 4,594-4,604 feet and 4,629-34½ feet, both of which were dry.

Magnolia Petroleum Co.'s No. 2 Wilson, 1,010 feet south and 1,240 feet east of C Section 33-14-4, had 12½-inch pipe set at 114 feet.

Oklahoma County

Sinclair Prairie Oil Co. and others' No. 1 Corbett, in the north end of the Britton area, NE NW NE Section 17-13-3w, was given a 24-hour test and produced 485 bbls. of oil with 80 bbls. of water and some h.s. It produces from sand at 6,645-6,706 feet.

Payne County

One of the most interesting tests in Oklahoma is the Amerada Petroleum Corp. and Stanolind Oil & Gas Co.'s No. 1 Friedman, SE cor. Section 28-19-3, not far from the college town of Stillwater in Payne County. In the past week at a total depth of 4,305 feet it bailed down 1,400 feet, when fluid began to rise and the well cleaned itself and flowed 20 minutes into pits. It quit for 30 minutes and then made another flow and was shut in for tankage.

In 24 hours Saturday and Sunday the well made 663 bbls. in 23 flows. It showed 1 per cent water, but it was not known whether it was fresh or salt.

In the Polo Pool, Noble County, Skelly Oil Co.'s No. 1 Hannah, NE SW SW Section 22-22-2w, was completed and given a potential rating of 1,647 bbls. per day, with 3,600,000 feet of gas. Dolomite was topped at 4,886 feet and pay at 4,908 feet, total depth 4,928 feet. It had been acidized.

Pits were dug for Shell Petroleum Corp. and others' No. 3 Malling, 990 feet west and 440 feet north of SE cor. Section 17-20-2w.

Creek County

Completions in Creek County included Jackson and others' No. 1 Turner, NW SW NW Section 6-17-8, Layton sand at 1,506-96 feet, 15 bbls. in 24 hours; L. B. Jackson's No. 2 Martin, NW NE NE Section 18-16-10, sand at 1,992-2,055 feet, 20 bbls. in 24 hours; Big Four Oil Co.'s No. 4 Templeton, NE SE SE Section 34-19-8, Red Fork sand at 2,600-25 feet, 75 bbls. in 24 hours. All three wells were shot.

New work in the county included Galbreath & Beyer's No. 1 Tiger, SE SW NE Section 35-18-8, location; Sparton Oil Co.'s No. 1-A Lee, CEL NW SE Section 13-18-11, machine in.

Wagoner County

H. T. Martin and others' No. 1, SE NE NE Section 15-18-15, Wagoner County, was dry and abandoned at 1,490 feet.

Tulsa County

Sparton Oil Co.'s No. 6, NW SE SE Section 13-18-14, Tulsa County, was dry and abandoned at 1,312 feet; Gust. Beegle's No. 1-A O'Keefe, NE cor. SW Section 4-19-10, dry and abandoned at 1,881 feet.

Okmulgee County

Completions in Okmulgee County include Regan and others' No. 2-A Culley, CEL SE NE Section 27-13-13, dry and abandoned at 2,001 feet; Clay's No. 1-A Pool, NW SW SW Section 13-14-12, 850,000 feet of gas; Hendrickson and others' No. 2 Harris, CNL SE SE Section 1-14-14, dry and abandoned at 1,667 feet; R. E. Downing's No. 1-A Colbert, C NW Section 1-15-14, 21 bbls. in 24 hours after a shot; Misener and others' No. 5 Simpson, C E half NW SE Section 10-15-14, 5 bbls. after a shot.

In the Southern Fields

Whatley and Whatley's No. 1 Holt, a wildcat in Jackson County, NE SW SE Section 20-1n-20, was dry and abandoned at 1,560 feet.

Dixon Oil Co.'s No. 1 Johnson, NE SW SE Section 17-1n-8w, Stephens County, was dry and abandoned at 2,480 feet.

Rock Island Refining Co.'s No. 1 Lynch, C SE SW Section 35-1s-16w, Tillman County, was dry and abandoned at 1,380 feet. It had Cisco sand at 1,317-59 feet but found only water in it.

L. A. Wilkins' No. 3 Crump, NE cor. NW NE NE Section 15-2s-5w, Stephens County, pumped 35 bbls. in 48 hours from a sand series at 820-906 feet.

Westheimer & Daube's No. 1 Lewis, 500 feet north and 160 feet west of SE cor. Section 4-2s-5w, Stephens County, pumped 17 bbls. the first day and 8 bbls. the second from sand at 845-50 feet and 877-95 feet, and was completed.

Skelly Oil Co.'s No. 2 Brooks, SW NE SE Section 17-2s-2w, wildcat in Jim Pool, Carter County, flowed 146 bbls. through tubing in 24 hours from a sand series at 1,890-2,055 feet.

Golden & Cochran's No. 3 Gann, 1,170 feet north and 710 feet west of C Section 31-2n-4w, Stephens County, is a 6-bbl. completion in sand at 958-73 feet. It pumped off in eight hours.

Shell Petroleum Corp.'s No. 25 Franklin, NE cor. NW SE NE Section 8-4s-3w, Healdton Pool, Carter County, deepened to 1,086 feet and produced 16 bbls. initially from sand at 945-1,073 feet.

Farlyn Oil Co.'s No. 31 Seay, 1,150 feet south and 880 feet east of C Section 3-7s-5w, Jefferson County, is a 20-bbl. pumper completed at 1,229 feet.

Centrop Oil Co.'s No. 2 Walker, SW cor. NE NE NE Section 35-7s-5e, Marshall County, was dry and abandoned at 440 feet. It had Arbuckle sand at 431-36 feet.

Prince Brothers have rig up for No. 1-A Williams, C SW SE Section 19-2-8w, Stephens County, a wildcat test. Gypsy Oil Co. was rigging up rotary tools to start No. 5 Kelly, NE SW NE Section 10-1n-20w, in the Altus Field in Jackson County. Cullum and others were drilling at 1,000 feet in No. 5 Smith, NW cor. SE SE SE Section 34-1s-10w, Cotton County. Ben Barnett had rig up for No. 2 Lynn, SE NW NE Section 31-1s-2w. Bridwell Oil Co.'s No. 2 Montgomery, NW cor. SW SE Section 11-2s-8w, Stephens County, was drilling at 426 feet. Skelly Oil Co.'s No. 3 Brooks, NE NE SE Section 17-2s-2w, set pipe at 69 feet. Mathis and others' No. 1 Black, SW cor. SW NW Section 16-7s-5w, an old well being cleaned out to drill deeper from 812 feet.

Gypsy Oil Co.'s No. 3 Kelly, NW NE NE Section 10-1n-20w, in the Altus Pool, Jackson County, had granite wash at 1,410-36 feet. It flowed 75 bbls. in three hours and was estimated to be good for 200 bbls. per day. It flows by heads. The well had not been completed. No. 4 Kelly was waiting for cement to set at 1,364 feet.

Bridwell Oil & Gas Co.'s No. 2 Nigh, NE cor. SE SW Section 11-2s-8w, Stephens County, found a gas sand at 2,023-26 feet and it was estimated as a 5,000,000 to 7,000,000-foot gasser, not completed.

Central West

Half Dozen Wells Drilling in Van Wert County, Ohio

By GEORGE A. WHITNEY

FINDLAY, Ohio, July 29.—In Sandusky County, M. Harley is drilling No. 11 on the H. Flora farm, Section 35, Scott Township. Perpetual Rights Corp. is drilling No. 2 on the Peter Bowe farm, Section 18, same township. In the same township, George A. and John A. Willard abandoned Nos. 5, 10, 15 and 21 on the J. C. Fisher farm, Section 8.

In Van Wert County there are now drilling half a dozen wells. In Jackson Township, Duncan & Smith are drilling No. 1 C. E. Bowersox, Section 17. Hystanton Oil & Gas Co. is drilling No. 3 on the J. A. Reed farm, Section 30, and Elmer Caudill & Co. is drilling No. 4 on the Mary A. Sheetz farm, same section. Mid-Continent Oil & Gas Co. is drilling No. 2 on Frank Brenneman farm, Section 1, Sugar Creek Township. J. A. Yahn is drilling No. 9 on the Anna C. Downs farm, Section 27, Liberty Township, and H. C. Miller is drilling No. 1 on the James P. Davis farm, Section 5, Jennings Township.

In Seneca County, J. L. Barrett is drilling No. 1 on the T. N. Einsel farm, Section 1, Hopewell Township. R. E. Green is drilling No. 3 on the G. C. and B. G. Schauli farm, Section 30, Liberty Township.

CENTRAL OHIO

In Lorain County, Corrine Kapacka's No. 1 on fee land in Ridgeville Township, is a gas well.

In Richland County, J. B. Reed is drilling No. 2 on the Keeneth McConkie farm, in Jefferson Township. In Holmes County, Hulse & Tedlow are drilling No. 1 on the Paul J. Blanchett farm, Lot 12, Richland Township.

In Tuscarawas County, Phillips & Co.'s No. 1, on the R. A. Stocker farm, Section 12, Oxford County, is drilling below 850 feet. Mike Hardwick is drilling No. 2 on the Larson B. Zimmerly farm, Lot 21, Perry Township. J. H. Harper is drilling No. 1 on the Oscar Kohler farm, Lot 29, Jefferson Township, and Capital Drilling Co. is drilling No. 6 on the Stewart Asher farm, Lot 19, Washington Township.

In Stark County, Brendel Producing Co.'s No. 3, on the Charles Yerkey farm, Section 21, Jackson Township, is a gas well. East Ohio Gas Co. is drilling No. 2 on the D. and M. Braucher farm, Section 10, same township. Same company is drilling No. 1 on the Peter Schensbeckler farm, Section 7, same township, and is drilling No. 4 on the James Boren farm, Section 13, same township. In Plain Township, East Ohio Gas Co.'s No. 1, on the Angeline Halter farm, is a gas well at a total depth of 4,440 feet. Same company is drilling No. 3 on the E. H. and Bertha Styre farm, Section 10, same township. Same company has a rig up for No. 1 on the Nelson Stambaugh farm, Section 4, Plain Township. In Perry Township, Stark County, Lyons & Co. is drilling below 4,160 feet in No. 1, on the Jacob F. Hess farm, Section 2.

In Pike County, Edgar Ruby has a gas well on the Fergua farm, Section 14, Clay Township, at a shallow depth of 370 feet. Goddard & Co. is drilling No. 1 on the Ryland Creel farm, Section 7, Union Township.

Perry County is showing active drilling operations. Mid-East Gas Co.'s No. 1, on the James A. Hull farm, Section 18, Clayton Township, showed an initial of 24 bbls. In Coal Township, Kachelmacher Oil Co.'s No. 10 is below 3,000 feet on the Hemlock Coal Co.'s farm, Section 25, Coal Township. Marshall Brothers are drilling No. 6 on the S. C. C. Co. land in Monroe Township. Marshall, Bauman & Co. is drilling No. 1 on the A. J. Mautz farm, Section 9, same township.

In Scioto County, Bachelor & DeWitt is drilling on the J. D. Shilling farm, Section 32, Madison Township. In Lawrence County, Shale Development Co.'s No. 1, on the W. P. Booth farm, Section 21, Union Township, has rig up. R. Straub is drilling No. 1 on the Caughlin Hunt farm, Section 35, Windsor Township, Lawrence County. C. C. Wolfe & Co. is drilling No. 1 Edward Miller farm, Section 28, and Frick & Co. is drilling No. 1 on the William Murdock farm, Section 28, Rome Township.

In Cuyahoga County, Ohio Fuel Gas Co. has a rig on the Ralph W. Frank farm, Lot 37, Strongville Township.

In Delaware County, Chester Wise is shut down at below 3,630 feet on the Herman D. Vance farm, Orange Township.

Ask Oil Be Exempted

By resolution, the executive committee of the Kansas-Oklahoma division of the Mid-Continent Oil and Gas Association has asked congressional committees to exempt oil companies handling natural gas from the terms of the Wheeler-Rayburn public utility holding company bill. The resolution points out that the production of oil and gas is inseparable, and that the sale of gas is in competition with other fuels. It asks that the exemption provisions contained in the house of representatives version of the bill be retained. They were retained by the senate committee, but stricken by amendments by Senator Clark of Missouri.

California Field Report

DRILLING IN PALISADES AREA SHOWS DECLINING TENDENCY

By
L. P. STOCKMAN

LOS ANGELES, Calif., July 29.—Drilling operations in the Palisades area or southeastern extension of the Playa Del Rey Field of Los Angeles Basin have shown a declining tendency during the past 60 days, and unless some outpost extends the present limits of production this area will show a gradual but consistent drop in development during the next several months. During June there were 17 wells drilling compared with 22 during May and 24 during April. The initial daily production of new wells has also shown a consistent drop although from a numerical standpoint completions in June and July were well up toward the top of the list. This is natural because many wells started 60 or 90 days ago are just being completed.

Developments during the past 15 days indicate that Manchester Avenue will probably mark the eastern limits of production and with production well defined out on the north flank only the south flank remains to be fully defined. Based on structural contours, it does not seem probable the Los Angeles City Council will find it necessary to enact any further restrictions to prevent drilling operations in the Palisades extension from encroaching on the bathing beach. Existing restrictions prevent the drilling of any wells south of Delagany Street and unless faulting is responsible for some irregularity operators will not find it necessary to progress beyond this point.

The closure, based on contours predicated on the top of the oil sand is very uniform in the Palisades section and tends to indicate this section of the field conforms with generally accepted theories of structural conditions. This is in direct opposition to the original theory that the abrupt rise of the Palisades above the main portion of the field which is slightly above sea level reflected a condition due to faulting. This field presents an interesting geological study because, while the bluffs are almost vertical and the Palisades section approximately 100 feet higher than the adjacent Vidor lease of the Union Oil Co., subsurface conditions do not reflect this topographic condition. The only pronounced change is in the nature of the productive horizon because whereas in the older section production is secured from a conglomerate, production in the Palisades area is coming from a rather well defined oil sand. Both the older and new areas have one characteristic in common, the productive horizon is located immediately above the Schist which definitely determines the ultimate bottom.

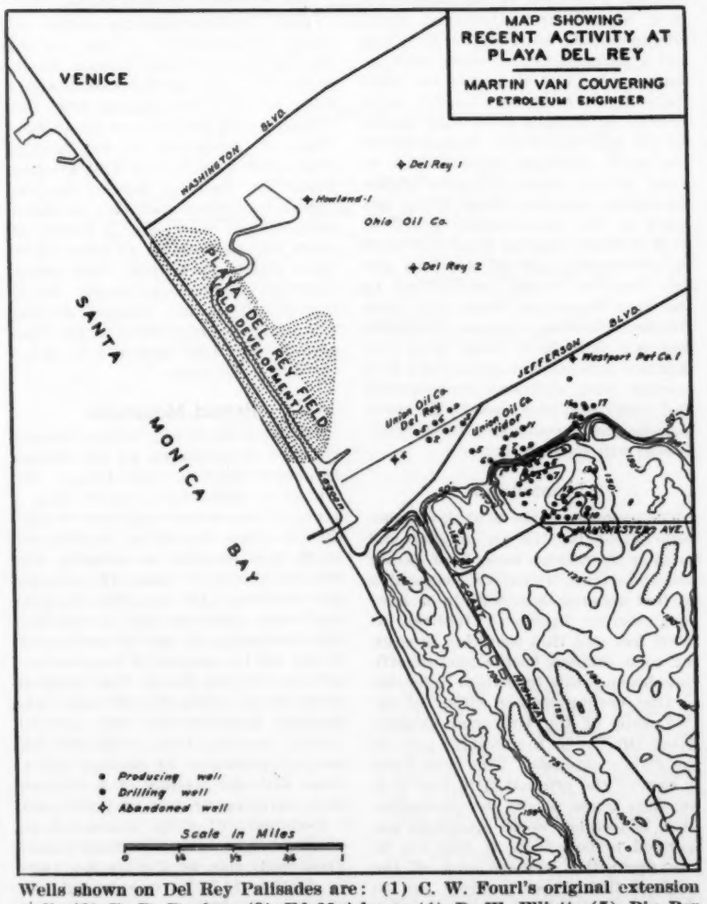
Litigation

Suits were filed early this week by George R. Larwill, special counsel for the state against operators in the Playa Del Rey Field who are charged by the director of natural resources with waste of natural gas and a determined effort will be made to secure a temporary injunction. Hearing on the order to show cause why a temporary restraining order should not be issued is scheduled to be heard July 29 but in view of the movement to secure signatures to a curtailment agreement it is likely the hearing will be postponed for a limited period. It appears probable this case will go to trial at an early date if operators fail to get together and settle their differences or fail to arrive at an equitable agreement to curtail production. The state has definitely decided to proceed with aggressive prosecution of violators of the state's rights with respect to tideland development and notice has been served upon operators producing from beneath state tidelands that the commonwealth will not tolerate open violation of curtailment because such overproduction will ultimately result in lower prices for crude oil and thus prove detrimental to the state's interest in production. The state is preparing to go into court on this basis if operators fail to agree upon a definite program of conservation.

Gas Fields

During the past year operators have come to the conclusion that commercial gas fields may become factors of considerable importance within another few years due to depletion of proved fields and the failure of operators to find new prolific fields. In addition operators holding productive acreage in existing fields, especially North Belridge and Kettleman North Dome, are rather reluctant to dispose of gas as they realize subsequent injection and repressuring of depleted horizons will result in increased production of crude. Despite the present unsettled condition of the refined oil market there is no prolific field bothering California operators. It is just a case of too much production in a number of fields. Montebello may possibly show a much higher production, due to extension work out in the extreme eastern end, but it is likely that even though substantial production should be developed in this field it will be rather closely held because the leases are all held in large blocks by reputable operators.

The Mountain View and Playa Del Rey Fields have caused a temporary break down in curtailment with a resulting lowering of refined oil prices but this condition is expected to be remedied within a short time. The Kerneo area at Mountain View is really the only highly productive section while at Playa Del Rey the production situation has been intensified by town lot development. Within another year both these fields should be producing a lot less. The Palisades section of the Playa Del Rey Field has already shown symptoms of depletion which will be reflected in production during the next 60 days.



Wells shown on Del Rey Palisades are: (1) C. W. Fourl's original extension well, (2) D. D. Dunlap, (3) Ed McAdams, (4) D. W. Elliott, (5) Big Ben Oil Co., (6) Royalty Service Corp., (7) Dunlap Pet. Co., (8) Pacific Drlg. Co., (9) Ritelube Oil Co., (10) Coast Pet. Co., (11) Colly Oil Co., (12) Dunlap Oil Co., (13) G. C. Champ, (14) Crest Oil Co., (15) Allied Pet. Co., (16) Dabney Pet. Co., (17) Royalty Service Corp., (18) Herndon Pet. Co., (19) Treasure Oil Co., (20) Milham Exploration Co.

Huntington Beach

Standard Oil Co. added a good well to its list of producers in the Huntington Beach Field of Los Angeles Basin early this week when No. 73-B was brought in doing 601 bbls. of 23.5 gravity per day from 4,343 feet after the hole had been finished with a 6⅝-inch liner carrying 498 feet of perforated. Stevco Oil Co.'s No. 2, bottomed at 4,188 feet, was finished on the beam pumping 208 bbls. of 25.5 gravity per day but may build up a little higher. In the Inglewood Field of Los Angeles Basin, Standard Oil Co. completed No. 105 Baldwin but it was good for only 360 bbls. of relatively clean 21.9 gravity per day from 2,311 feet after the hole had been plugged back from 6,284 feet due to inability to develop deep production at this depth.

Three new wells were put on production in the Long Beach Field this week but none of them showed large production. Elmore Oil Co.'s No. 2 Long Beach, bottomed at 4,780 feet but plugged back to 4,530 feet and finished with a 4¾-inch liner carrying 50 feet of perforated was brought in pumping 388 bbls. of relatively clean 26.1 gravity oil per day. Lamont Oil Co.'s No. 1 Signal, finished at 8,186 feet but redrilled to 3,974 feet, was put on production a few days ago but was good for only 271 bbls. of 26.1 gravity oil per day. No. 3 Goodyear of Signal Oil & Gas Co., another well finished this week was good for 315 bbls. of 24.2 gravity per day from 4,669 feet after the hole had been redrilled to 4,198 feet and finished with a 5¾-inch liner including 78 feet of perforated. In the Santa Fe Springs Field, Union Oil Co. finished No. 82 Bell but may require

further work as the output is cutting approximately 60 per cent.

Elwood

Signal Oil & Gas Co. finished a well in the Elwood Field early this week good for 1,300 bbls. per day on a compressor. This producer was finished at 3,766 feet and is showing a rather high cut but may clean up. It was No. 98-4 out in the open ocean at the end of a pier. Caroline Spalding has a rig for No. 11 on tideland permit No. 93 and when this well gets under way each operator in the field will have at least one well drilling. Most of this new work is being done to exploit the Sespe formation which underlies the Vaqueros discovered several years ago by Barnsdall and Rio Grande Oil companies which are jointly developing several leases. Barnsdall is doing the actual work as far as development is concerned. The Sespe has been held back for several years with the result that most of the production of this field has come from the Vaqueros sands.

Up in the Capitan Field of Santa Barbara County Shell is making preparations to start three new wells and at least one is expected to get under way within a few weeks. It is likely General Petroleum, discoverer of this field, will start additional work shortly. The Santa Barbara Mesa Field is rapidly becoming a quiet settled old field and within another month there will probably not be a single string of tools in operation. Property Service Corp. is making good progress with its deep test on the Dabney-Lloyd lease in the Ventura Avenue Field as it is already below 8,700 feet. This well showed some oil higher up but mechanical trouble prevented a successful production test. It is about one-half mile east of production in the Ventura Avenue Field. General Petroleum should be in a position to make a production test on No. 13 Notten within a short time as it is below 9,475 feet and headed for the deep 57 zone discovered by Associated Oil Co. several years ago. General Petroleum's first deep test failed to come up to expectations due to water. It had plenty of kick, showing a large volume, but water could not be shut off.

Edison

C. E. Appling has completed No. 1 in Section 4-30-29 in the Edison Field but the well is not yet on steady production. This new producer was completed pumping 35 bbls. per day from 3,582 feet but the small production has prompted this operator to lower the tubing and make other tests to determine the best operating status. The A. T. Jergins Trust, discoverer of the Edison Field, has recompleted No. 1-A Hershey and that this reconditioning work proved successful is evidenced by the fact that the well has been returned to production pumping 350 bbls. of 16.5 gravity per day from 1,389 feet. General Petroleum's No. 5 Brantley in the Mountain View Field furnishes a striking contrast to previous completions on this lease and on adjacent properties in the Kernco section because it was good for only 50 bbls. per day on the beam from 5,628 feet. Drilling operations are declining in the Mountain View Field and at the present rate there will not be much drilling within another several months. Hancock and a few other operators have several additional locations to be drilled but this work for the most part will be held up until late this year because the small allowable does not justify additional expenditures.

Several additional gas wells are scheduled for early completion in the Semi-Tropic gas field of Kern County and at the present rate an active aggressive development program may be expected during the next several months. This field is the largest gas field in California from an areal standpoint. It is several miles long and apparently is productive over the entire area. The wells are not especially highly productive but the large amount of acreage more than makes up for this deficiency. Buttonwillow gas field, although more limited in areal extent, shows a much higher production per well. Many of the gas wells in the Buttonwillow gas field were finished flowing from 75,000,000 to 100,000,000 feet of dry gas per day whereas recent completions in the Semi-Tropic gas field have been finished flowing around 20,000,000 feet per day. Both fields have two separate productive horizons and it is possible with additional development and under conditions where the wells may be given conclusive tests Semi-Tropic will show up better.

Montebello

The eastern extension of the Montebello Field is still an enigma and drilling operations have been rather unsatisfactory. Texas Co., according to last reports, was still in a hard conglomerate in No. 1 Whittier at 5,300 feet and this condition is causing some anxiety on the part of officials because this formation is foreign to that encountered in either of the two wells of the Universal Consolidated Oil Co. in the western part of the field's extension. This new work is east of the original field and it is anyone's guess where the productive area is located. Some operators are inclined to believe there will not be any productive acreage east of the original fild. These projects are in close promixity to the older section but another well, No. 1 Lapworth of the Woodward Oil Co., in the extreme eastern end picked up the Miocene at approximately 3,100 feet and cored a good looking oil sand. This well tends to indicate the Miocene is rising in the eastern end of the extension and while this might be considered favorable it is rising too fast because the logs of intervening wells cannot be correlated. This tends to indicate the structure is dominated by a faulted condition and might require several additional tests before the trend of the structure is ascertained.

West American Oil Co., which recently abandoned a wildcat in the Bandini area of Los Angeles Basin, is rigging up a second test about 4 miles north of the original test. The Western Gulf has not yet found anything of importance in its Bandini wildcat on a portion of Vail aviation field. The Bandini district has enticed a number of operators to undertake wildcat work over a period of years because it is in an area where there should be a field. Only minor showings have been logged. Great Coastal Oil Co. has resumed drilling operations on its wildcat in the Elsinore district. This work will be prosecuted by cable tools.

Round Mountain

Honolulu Oil Corp., which recently resumed development in the Round Mountain Field of Kern County following a suspension of more than a year, added another well to its producers when No. 47 in Section 18-28-29 was brought in pumping 510 bbls. of relatively clean 17.1 gravity per day from 2,185 feet after the hole had been finished with a 6⅝-inch liner including 48 feet of perforated. Union Oil Co. completed an excellent new well in the Mount Poso Field of Kern County when No. 25 S.&M. was finished pumping 834 bbls. of 17.1 gravity per day from 1,860 feet following completion of drilling operations with the landing of a 6⅝-inch liner carrying 91 feet of perforated.

Honolulu Oil Corp. completed an excellent well in the Midway-Sunset Field early this week when No. 14-44 in Section 14-32-24 was brought in pumping 610 bbls. of 26.7 gravity per day from 3,250 feet. This company should finish No. 14-45 within 15 days as it is well under way. Out on the Kern Front, Republic Petroleum Co. completed No. 2 Strassburger at 2,109 feet, brought in pumping 299 bbls. of 16.2 gravity after the hole had been finished with an 8⅝-inch liner including 244 feet of perforated.

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	July 14		July 7			
	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Intercoastal-domestic:						
Fuel oil	.....	.....	.....	.....	.....	3,338,186
Diesel and gas oil	.....	.....	.....	.....	527,098	1,000,056
Gasoline	192,911	27,559	.....	.....	4,162,725	3,753,454
Kerosene	.....	.....	.....	.....	669,351	579,421
Asphalt	.....	.....	.....	.....	.....	70,019
Other finished oil	.....	.....	.....	.....	.....	25,759
Foreign exports:						
Crude oil	98,942	14,135	.....	.....	6,246,635	3,864,681
Fuel oil	309,228	44,175	343,799	49,114	7,029,073	6,841,525
Diesel and gas oil	165,631	23,669	177,871	25,410	2,508,155	2,225,197
Gasoline	47,914	6,845	147,048	21,007	3,364,163	2,151,517
Kerosene	41,760	5,966	.....	.....	813,478	1,061,392
Other finished oil	.....	.....	.....	.....	.....	3,529
Other unfinished oil	3,540	506	.....	.....	69,362	186,069
Coastwise-domestic:						
Crude oil	130,459	18,637	140,538	20,075	3,120,158	4,774,713
Fuel oil	136,052	19,436	102,109	14,587	5,196,673	4,864,972
Diesel and gas oil	6,089	870	6,170	881	523,381	389,351
Gasoline	260,610	37,230	277,046	39,578	5,610,428	6,065,884
Kerosene	.....	.....	4,118	588	77,140	87,233

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic:						
Fuel oil	.....	.....	.....	.....	.....	110,650
Diesel and gas oil	.....	.....	.....	.....	157,258	448,113
Gasoline	.....	.....	.....	.....	.....	145,306
Kerosene	.....	.....	.....	.....	149,715	276,412
Asphalt	.....	.....	.....	.....	280,849	.....
Lubricants	.....	.....	.....	.....	29,221	26,500
Foreign exports:						
Crude oil	.....	.....	.....	.....	1,426,499	1,005,072
Fuel oil	60,074	8,582	.....	.....	1,101,382	994,621
Diesel and gas oil	.....	.....	.....	.....	630,348	818,270
Gasoline	152,337	21,762	.....	.....	1,599,031	1,879,043
Kerosene	21,384	3,055	.....	.....	468,940	510,089
Lubricants	1,716	244	.....	.....	131,784	89,744
Other finished oil	.....	.....	.....	.....	.....	2,760
Other unfinished oil	.....	.....	.....	.....	.....	5,750
Coastwise-domestic:						
Fuel oil	193,218	27,603	175,401	25,057	3,341,337	2,770,368
Diesel and gas oil	.....	.....	.....	.....	141,667	100,129
Gasoline	106,739	15,248	19,480	2,783	2,700,302	2,178,170
Kerosene	.....	.....	3,377	482	60,647	57,464

Committee to Arrange for A.P.I. in California

C. S. Jones, executive vice presidentdent of the Rio Grande Oil Co., Los Angeles, Calif., has been appointed general chairman of the committee organization now making local arrangements for the sixteenth annual meeting of the American Petroleum Institute in Los Angeles November 11 to 14.

Other committee chairmen include: Finance, R. D. Matthews, Union Oil Co. of California; reception, W. C. McDuffie, Richfield Oil Co. of California; hotel reservations, C. E. Olmsted, Texas Co. (California); banquet, W. L. Stewart, Jr., Union Oil Co. of California; transportation, J. U. Stair, Shell Oil Co.; publicity, H. E. Britzman, Rio Grande Oil Co.; golf, J. A. Jones, Associated Oil Co.; at large, W. L. McLaine, General Petroleum Corp. of California; and wildcats, J. A. Dunn, National Supply Co. of California. Entertainment will be in charge of the Wildcats, a social organization.

Included among the committees is a general committee of 100 prominent oil and supply company executives representing all phases of the industry. An advisory committee also has been appointed, with R. E. Collom, of Continental Oil Co., as chairman. Members are:

Lionel Barneson, Bankline Oil Co.; S. Belither, Shell Oil Co.; A. C. Dieriex, Honolulu Oil Corp.; D. S. Faulkner, National Supply Co. of California; E. B. Gilmore, Gilmore Oil Co.; P. M. Gregg, Union Oil Co. of California; S. A. Guiberson, Jr.; Oscar R. Howard; W. F. Humphrey, Associated Oil Co.; and K. R. Kingsbury, Standard Oil Co. of California. L. H. Keim, Oil Well Supply Co.; W. H. Morgan, R. R. Bush Oil Co.; W. C. McDuffie, Richfield Oil Co. of California; A. B. Macbeth, Southern California Gas Co.; A. C. Mattei, Honolulu Oil Corp.; S. B. Mosher, Signal Oil & Gas Co.; T. A. O'Donnell; P. H. O'Neil; William Reinhardt, Kettleman North Dome Association; F. C. Ripley, Chanslor-Canfield Midway Oil Co.; C. C. Stanley, Texas Co.; W. L. Valentine, Fullerton Oil Co.; and H. L. Westbrook, Belridge Oil Co.

Members of the executive committee are: General Chairman Jones; R. A. Broomfield, Barnsdall Oil Co.; J. A. Crawford, Republic Supply Co. of California; Ralph B. Lloyd, Lloyd Corp.; C. E. Olmsted, Texas Co. (California); L. P. St. Clair, Union Oil Co. of California; and A. L. Weil, General Petroleum Corp. of California.

Oil Town Gateways

PETROLIA, Ontario, July 27.—Gate posts, representing 6-foot steel drilling derricks and accompanying engine house draw-works surmounted by light globes, will be installed at the eastern and western entrances to the Canadian oil metropolis of Petrolia.

Illinois Ratifies Pact

AUSTIN, Tex., July 29.—Gov. James V. Allred has received notice that Illinois has ratified the proposed oil states compact.

Southwest Texas District

By GEORGE WEBER

DISCOVERIES IN BEE, GOLIAD; PLYMOUTH FIELD EXTENDED

SAN ANTONIO, Tex., July 29.—Prospect of a new field in western Goliad County was indicated late in the week when the Brown and Wheeler No. 1 Kaufman in the Trevino Survey tested 270 feet of oil in 15 minutes on a drill stem test using a quarter-inch choke. Following the test the casing was cemented, and the plug will be drilled early in the week. In drilling the well a sand was encountered at 4,200 feet which showed possibilities for a small well, but the operators passed it up for a deeper test. The block on which this well was drilled was taken over recently by Cooper and Frates of San Antonio who contracted with Brown and Wheeler of Houston for the drilling.

Another strike in southern Bee County, George M. Church's No. 1 Wood, promises a new field in that area about 3½ miles southeast of Beeville. At 4,825 feet the well tried to blowout but operators succeeded in controlling the pressure by pumping in heavy mud. The well still is making considerable gas. The horizon at which the well tried to blowout is believed to be from the Hockley.

Plymouth Extension

The Plymouth Field received a 2-mile south extension in Magnolia Petroleum Co.'s No. 1 Corpus Christi Bank well which produced 120 bbls. in 24 hours up to 7 a. m. Saturday. The well was completed at 5,600 feet. It is a short distance south and east of Violet Oil Co.'s No. 1 Welder which was abandoned this week. This dry hole was believed to mark the south limit of the Plymouth Field, but the new Magnolia producer indicates the field may extend in a north and south direction to the east of the Violet dry hole.

Two other completions were made in the Plymouth Field in the past week. Heep Oil Corp.'s No. 4-E Welder was completed at 5,659 feet. Tubing and casing pressure of 1,800 pounds was encountered. The well was not gauged but is rated as a small producer. Plymouth Oil Co.'s No. 6-C Welder was completed at an estimated 25 bbls. per hour through a three-sixteenths inch choke. Tubing pressure was registered at 550 pounds and casing pressure was 875 pounds.

San Patricio County

An important test was started this week in Willis Storm's No. 1 Hobbs near the town of Mathis in western San Patricio County. This wildcat will go to 7,000 feet unless production is encountered at a higher level.

Frio County

Amerada Petroleum Corp.'s No. 1 Smith is drilling plug at 6,085 feet, about 3½ miles southwest of the new Pearsall Field in Frio County. The pipe was run to protect the hole. The well is at present in the Georgetown lime, and plans call for further drilling into the Edwards.

Midland Oil Co.'s No. 1 San Antonio Joint Stock and Land Bank, 1 mile south of Pearsall, was nearing 3,900 feet at the latest reports. The well is being drilled to test the Navarro sand at about 3,900 feet. Considerable interest is being taken in this test, as production was found in the Navarro by Amerada about 4 miles southwest.

Zavala County

A contract for the drilling of a well on a block of acreage in Zavala County was reported to have been closed by Frank Buttram of Oklahoma. This block is near the Amerada Frio County block on the southwest.

Loma Novia

The Loma Novia Field led the Laredo district in activity during the week with five completions and six locations. Magnolia Petroleum Co.'s No. 4 Hahl made about 150 bbls. per day at 2,709 feet. Bridwell Oil Co. completed No. 1 Hubbard for about the same initial production. Texas Co.'s No. 1 Hugo Wendt was making 21 bbls. per hour from a sand at 2,635-53 feet. No. 6 G. Ruiz well of Humble Oil & Refining Co. made an initial of 10 bbls. per hour at 2,768 feet.

Five producers were added to the Government Wells Field: Simpson-Fell Oil Co.'s No. 8 Moody, Magnolia Petroleum Co.'s No. 3 Hahl, No. 48 D.C.R.C., No. 3 Alice Loffler and No. 15 Wilson. All were comparatively small wells.

Loma Alta

Interest in the Loma Alta Field in southern McMullen County lagged decidedly with the abandonment of Illinois Petroleum Co.'s No. 2-A Ellen Atkinson. This was an east offset of the discovery well. However, interest was revived when Humble Oil & Refining Co. completed No. 1 Atkinson, a west offset of the discovery well, for an initial production of 7 bbls. per hour.

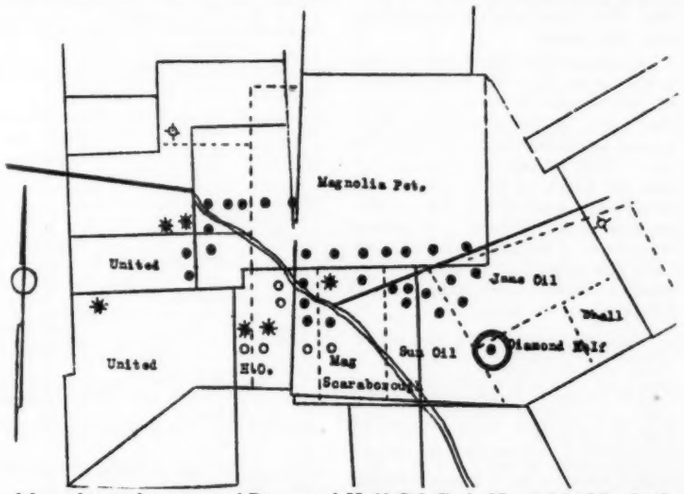
Duval County

A new field in Duval County is expected to be proven by T.G.&M. Drilling Co.'s No. 1 Wm. Davidson Estate, wildcat, which hit sand at 2,929-32 feet showing oil. The well is now being tested.

Marts & Beavens' No. 1 Leatherwood, a wildcat in Bastrop County, topped the Edwards lime at 3,240 feet and cored 3,275-77 feet with an odor of oil.

Webb County

An important southeast extension of the Cole Field in Webb County was determined by Magnolia Petroleum Co.'s No. 3-G Benevides, which flowed 10 bbls. per hour at a horizon of 2,758 feet. Two other completions were made in the Cole Field and one in the West Cole area.



Map shows location of Diamond Half Oil Co.'s No. 1 Mudd which extended production to the southeast in the North Pettus district, Goliad County, Southwest Texas

Sam Fordyce

In the Rio Grande Valley district much activity is being maintained with drilling continuing in both proven and wildcat areas. The wild gasser of K. D. Harrison and others, No. 3 Guerra, in the Sam Fordyce Field, was brought under control late in the week. This well, which has been blowing wild for about a week, was capped and killed with heavy mud and water. Drilling in the nearby No. 3 Guerra will proceed, having been held up by the wild gasser.

The deep Mercedes test of Union Sulphur Co., No. 2 American, was abandoned this week at 6,300 feet. This well was one of the first two tests drilled in the area. It was spudded in July, 1934, and abandoned at 8,044 feet in January. Meanwhile, the company completed the discovery well and decided to rework No. 2 American. The hole was sidetracked at 4,000 feet, drilled to 8,044 feet and again abandoned this past week.

Dirks Pool

Four new producers were added to the Dirks Pool in Bee County this week: L. A. Douglas' No. 1 Imogene Hall, flowing at 100 bbls. a day; Heyser-Heard and W. D. Walton's Nos. 3 and 5 Henry Clay Young, making 350 and 325 bbls. per day, respectively, through one-quarter inch chokes; and Texas Co.'s No. 2 Young, producing 800 bbls. per day. These wells were completed at depths ranging from 3,852-3,925 feet.

Texan Royalty Co. added an important producer to the Saxet Pool in Nueces County in completing No. 1 Isensee. The well made 500 bbls. per day through a one-quarter inch choke.

Michigan Gas Reserves

MUSKEGON, Mich., July 29.—A statewide meeting to discuss the Michigan natural gas situation with a view to developing a greater Michigan market large enough to compete with outside gas and a Michigan gas supply adequate to serve leading communities not now receiving the benefit has been called by the Public Utilities Commission for Wednesday, August 7.

The formal report of a survey of Michigan's natural gas resources made last fall was made public by the Bureau of Mines, which estimated the reserves as of January 1, 1935, at 36,650,000,000 feet. "Further development of proved fields might add 18,000,000,000 feet and development of new fields might add another 40,000,000,000," the report stated. Since January 1 some additional reserves have been proved but not in these amounts.

Silver Dollar Pay Roll

CLEVELAND, Ohio, July 27.—In an effort to answer the age-old question, "Where does all the money go?" the Standard Oil Co. of Ohio announced its August 1 pay roll would be paid with 110,000 silver dollars.

Because dollar coins are a comparative rarity in this part of the country, the special co-operation of the Cleveland Federal Reserve Bank was enlisted in gathering the money, which will weigh nearly 4 tons.

To make the test a success, store managers have been asked to report on the number of the silver dollars they receive and to name the kind of merchandise purchased.

Rocky Mountain Area

NEW MONUMENT POOL TESTS EXPECTED TO OUTLINE TREND

By T. R. INGRAM

DENVER, Colo., July 29.—New Mexico's allowable outlet was increased by 1,000 bbls. a day for the last half of July. Three wells in the new Monument Pool are at critical stages and are expected to throw light on the trend of the pool. Only one new location was released for Lea County this week. The Empire Gas & Fuel Co.'s No. 1-C State, in the Eunice Pool, was completed for 141 bbls. an hour. The Amerada Petroleum Corp. has a small well in its No. 3 Everett, in the Cooper Pool, R. H. Henderson's No. 1 Langlie, a wildcat east of the Jal Pool, had two shows of oil and 1,000,000 feet of gas. The Samedan Oil Co.'s No. 1 Byers, a flank well in the Hobbs Pool, made 16,105 bbls. and 17,000,000 feet of gas a day after treating with 15,000 gallons of acid. Anderson & Prichard's No. 1 Fisher, in the Lea area, was abandoned, and the Maljamar Oil & Gas Co.'s No. 1 Miller extended the Maljamar Pool 1 mile in a 40-bbl. well. Flynn, Welch & Yates' No. 2 Donahue, in Otero County, was abandoned in granite.

There were no completions or new locations in Colorado.

The Ohio Oil Co.'s No. 2 Lamb, in the Lance Creek Field, in Wyoming, is a completion and is swabbing to test, and that company made one new location. One small well, flowing 20 bbls. a day, was completed in the Osage Field.

The Ohio Oil Co. and the International Refining Co. met crude oil cuts in the Kevin-Sunburst Field in Montana. Cut Bank reported two small wells completed and four new operations. The Continental Oil Co. spotted another wildcat in Stillwater County and the Kevin-Sunburst Field had three average completions.

The Mountain Fuel Supply Co.'s No. 2 Murphy, Clay Basin area, Utah, had water in upper Sundance sands.

NEW MEXICO

The allowable outlet for New Mexico was set at 50,800 bbls. daily for the last half of July, an increase of 1,000 bbls. daily as compared with the first half of the month. The increase was made primarily to take care of new wells completed since the July 1 schedule was made up and there was no change in the top allowable of 145 bbls. per well.

Monument Area—Lea County

Three of the drilling wells in the new Monument Pool are at critical stages. The Superior Oil Co.'s No. 1 State, C NE NE Section 2-20-36, an offset on the west to the Amerada Petroleum Corp.'s No. 1-D State, the discovery well, is showing for an erratic producer, but is not yet listed as a completion. Total depth is 3,945 feet and it had a show of oil and gas at 3,797-3,840 feet. The 7-inch is at 3,791 feet. It was treated with 3,000 gallons of acid and allowed to stand for six hours. After swabbing a little oil it went dead. It was then treated with 4,000 gallons and waited 12 hours. It swabbed 70 to 80 bbls. an hour through the tubing and then went dead. The 2½-inch was at 3,900 feet. It was then treated with 6,000 gallons and is waiting on acid.

The Twin States Oil Co.'s No. 1 Weir, C NE SE Section 35-19-36, a north offset to Shell's No. 1 State, a producer, and three fourths of a mile to the northwest of the discovery, is preparing to run tubing and test at a total depth of 3,935 feet. It is showing up better at this stage of operations than the Superior company's well. It had a show of oil at 3,801-05 and 3,840-57 feet, followed by a show of gas at 3,860-70 feet and then a good show of oil at 3,891-97 feet. The 7-inch was set at 3,795 feet with 200 sacks.

The third of the three critical wells is the Texas Co.'s No. 1 Saunders, C SE SW Section 18-19-37, 3½ miles to the north of the discovery, which gauged 56,000,000 feet of gas at 3,900 feet. After killing the gas and setting the 7-inch at 3,762 feet, it was deepened to 3,953 feet in blue crystaline lime, at which depth it is unloading to test. A drill stem test at 3,762-3,946 feet open for 3 hours and 28 minutes showed approximately 500 feet of oil in the hole.

Amerada Pet. Corp.'s No. 1 Andrews, W NW NW Sec. 12-20s-36.
Drlg. 2,249 ft. in salt.

Jeffers Oil Co.'s No. 1 Britt, C SE NW Sec. 7-20s-37.
Drlg. 538 ft. in red beds.

Twin State Oil Co.'s No. 1 Weir, C NE SE Sec. 35-19-36.
T.D. 3,935 ft. in lime; showing oil and gas; preparing to test.

Superior Oil Co.'s No. 1 State, C NE NE Sec. 2-20-36.
T.D. 3,945 ft.; testing and acidizing.

Texas Co.'s No. 1 Saunders, C SE SW Sec. 19-19-37.
T.D. 3,956 ft.; bailing down to test.

Eunice Area

One completion, one new operation and two near completions were reported in the Eunice Pool. The Empire Gas & Fuel Co.'s No. 1-C State, NW NW SW Section 16-21-36, which proves up about 40 acres on the east side, was completed at 3,912 feet from the pay topped at 3,900 feet. The 7-inch was cemented at 3,764 feet and the elevation is 3,627 feet. Before acidizing it made 5 bbls. an hour. After treating with 2,000 gallons it averaged 141 bbls. an hour. It made 100 bbls. an hour through tubing.

The first report is the Atlantic's No. 2-G State, a west offset to its No. 1-G State.

The Humble Oil & Refining Co.'s No. 4-B State, C NW NE Section 29-21-36, on the east side, averaged 30 bbls. an hour in a two-hour test at 3,900 feet, total depth, the gas-oil ratio being 5,000/1. The gas was estimated at 10,000,000 feet a day and it was treated with caustic soda in an effort to kill the gas and is waiting on the action of the soda.

The other near completion, which looks like it will make a good well, is the Continental Oil Co.'s No. 9-B-4 Meyers, C NE NW Section 9-21-36, an outside well on the northeast, which will prove up one unit. Total depth is 3,884 feet. It made 150 bbls. of oil per hour through the 5½-inch with 10,000,000 feet of gas, and is preparing to run tubing.

Atlantic Oil Prod. Co.'s No. 2-C State, C SE SE Sec. 5-21-36.
Drlg. 2,038 ft. in br. l. and anhyd.; top salt 1,285 ft.; b. s. 2,595 ft.

Atlantic Oil Prod. Co.'s No. 1-G State, C SE SW Sec. 5-21-36.
T.D. 3,890 ft.; running 2½-in.; tested 25 bbls. per hour with 1,000,000 ft. of gas.

Atlantic Oil Prod. Co.'s No. 2-G State, C SW SW Sec. 5-21s-36e.
Spudding.

California Co.'s No. 1 State, Location 2, C SW SE Sec. 20-21s-36e.
Drlg. 2,065 ft., salt and anhyd.; 8⅝-in. at 1,636 ft., 400 sacks.

California Co.'s No. 2 Meredith, C SE SE Sec. 19-21s-36e.
R.U.R.

Continental Oil Co.'s No. 8-A-4 Meyers, C NW SW Sec. 8-21s-36e.
Location.

Continental Oil Co.'s No. 17-B-1 Meyers, C NE SE Sec. 17-21s-36e.
Location.

Continental Oil Co.'s No. 8-B-2 Meyers, C SW NW Sec. 8-21s-36e.
Digging cellar.

Continental Oil Co.'s No. 18-A-2 Meyers, C NE SE Sec. 18-21s-36e.
Location.

Continental Oil Co.'s No. 18-A-3 Lockhart, C NE SW Sec. 18-21s-36e.
Location.

Continental Oil Co.'s No. 20-C-5 State, C SW SW Sec. 20-21-36.
T.D. 3,932 ft.; pay at 3,869-3,932 ft.; flowed 150 bbls. in 1 hr. through csg. with 22,000,000 ft. of gas; testing.

Continental Oil Co.'s No. 9-B-4 Meyers, C NE NW Sec. 9-21-36.
T.D. 3,884 ft.; tested 150 bbls. per hr. with 10,000,000 ft. gas open; preparing to run tubing.

Gypsy Oil Co.'s No. 1 Orcutt, C SE NW Sec. 5-21-36.
Rig; W.O. tools.

Gypsy Oil Co.'s No. 2 Houston, C NE SE Sec. 7-21s-36e.
Drlg. 1,252 ft. in anhyd.

Humble O. & R. Co.'s No. 5-B State, C SW NE Sec. 29-21s-36e.
Derrick up; M.I. tools.

Humble O. & R. Co.'s No. 4-B State, C NW NE Sec. 29-21-36.
T.D. 3,900 ft.; trying to kill gas; tested 30 bbls. per hr. with 10,000,000 ft. of gas.

Jim Murray's No. 1 Wallace, SW SW SW Sec. 2-21s-36e.
R.U.R.

R. Olson et al's No. 1 State, C NW SE Sec. 5-21s-36e.
Spud. July 2; landed 12½-in. at 83 ft.; R.U.R.

Ohio Oil Co.'s No. 1 State-Maxwell, C NE NW Sec. 16-22-36.
Drlg. 1,650 ft., anhyd. and salt; 9⅝-in at 1,521 ft. with 1,000 sacks.

Phillips Pet. Co.'s No. 1 Woolworth, Block 3, C SW SW Sec. 6-22-37.
Derrick up; M.I. tools.

Repollo Oil Co.'s No. 2 Adkins, SW SW SE Sec. 9-21-36.
Drlg. 1,525 ft., salt and anhyd.

Shell Pet. Corp.'s No. 1-A State, C SE NE Sec. 12-21-35.
T.D. 4,404 ft.; P.B. to 3,926 ft.; shot and C.O. to 3,904 ft.; on 4-day test swbd. 65 bbls. oil and 10 bbls. of wtr. per day; waiting for pumping equip.

Shell Pet. Corp. and Devonian O'l Co.'s No. 2 State, C NW NE Sec. 20-21s-36e.
Drlg. plug; 9⅝-in. at 1,690 ft. with 650 sacks.

Texas Pacific Coal & Oil Co.'s No. 1-A State, Acct. 2, C SE SW Sec. 9-22-36.
T.D. 1,523 ft. in salt; W.O.C. 9⅝-in. at 1,498 ft. with 800 sacks.

Twin State Oil Co.'s No. 1 Record, C NW NW Sec. 22-22s-36e.
Preparing to spud with machine.

Cooper Area

The only completion in the Cooper Pool, an inside location, was the Amerada Petroleum Corp.'s No. 3 Everett, C NE SE Section 34-24-36, which flowed 15 bbls. of pipe line oil an hour through the 2½-inch at 3,462 feet on a 1-inch choke, with 3,000,000 feet of gas. Total depth is 3,495 feet and the elevation is 3,279 feet. The gas-oil ratio is 630/1. It was treated with 2,000 gallons of acid.

The Atlantic Oil Producing Co. and Kirby Petroleum Co.'s No. 1 Woolworth, C SW NE Section 26-24-36, lost circulation at 3,367-69 feet and blew at the rate of 35,000,000 to 50,000,000 feet of gas a day. It used 600 tons of baroid, mud, cotton seed, etc., to kill and re-establish circulation.

The Tide Water Oil Co.'s No. 1 Coats, C SW NE Section 10-24-36, should be the Sims Oil Co., a corrected location.

Amos G. Carter et al's No. 1 Matti, C SE NW Sec. 3-24-37.
T.D. 3,913 ft.; bridged at 3,658 ft. after P.B. to 3,863 ft. with lead wool; shot with 160 qts. at 3,500-3,652 ft.; swabbed 40 bbls. per day while C.O.

Atlantic O'l Prod. Co. and Kirby Pet. Co.'s No. 1 Woolworth, C SW NE Sec. 26-24-26.
T.D. 2,468 ft.; W.O.C. 5½-in. at 2,452 ft. with 1,000 sacks.

Continental Oil Co.'s No. 14-A-5 Vaughn, C NW NW Sec. 14-24-36.
T.D. 1,779 ft.; W.O.C. 8⅝-in. on bottom with 500 sacks.

Continental Oil Co.'s No. 14-A-6 Vaughn, C NE SW Sec. 14-24s-36e.
Location.

Continental Oil Co.'s No. 14-A-4 Vaughn (formerly No. 14-4-A), C NW SW Sec. 14-24-36.
Ready to spud.

Continental Oil Co.'s No. 14-A-3 Vaughn, C SW NW Sec. 14-24-36.
Drlg. 3,501 ft., gray sdy. lime; D.S. test 3,475-3,500 ft. open, 20 minutes, 2,000,000 ft. of gas and oil show.

Continental Oil Co.'s No. 15-A-2 Vaughn, C SW SE Sec. 15-24-36.
Location.

Continental Oil Co.'s No. 23-A-2 Gates, C NW NW Sec. 23-24-36.
Rig.

Continental Oil Co.'s No. 27-A-1 Gates, C SE SE Sec. 27-24s-36e.
Location.

Gypsy Oil Co.'s No. 1 Cooper, C SW SW Sec. 11-24s-36e.
Drlg. 1,530 ft., anhyd. and salt.

Gypsy Oil Co.'s No. 2 Cooper, C NW SE Sec. 23-24s-36e.
Derrick.

Humble O. & R. Co.'s No. 1 Cooper, C SE NW Sec. 14-24s-36e.
T.D. 2,854 ft.; W.O.C. 7-in. at 2,850 ft. with 60 sacks.

Humble O. & R. Co.'s No. 1 Mosely, C SE SE Sec. 10-24-36.
T.D. 3,080 ft. in anhyd.; W.O.C. 7⅝-in. at 3,075 ft. with 50 sacks.

Humble O. & R. Co.'s No. 3 Coats, C NW NW Sec. 10-24s-36e.
Drlg. 1,464 ft. in anhyd.

Phillips Pet. Co.'s No. 16 Woolworth, C NE SE Sec. 27-24s-36e.
Derrick.

Skelly Oil Co.'s No. 1 Coats, C SW SE Sec. 3-24-36.
Drlg. 2,270 ft., anhyd. and salt.

Tide Water Oil Co.'s No. 1 Woolworth, C SW SE Sec. 26-24-36.
T.D. 3,495 ft.; lost returns after drlg. plug; filled with fresh water; swabbing water.

Simms Oil Co.'s No. 1 Coats, C SW NE Sec. 10-24s-36e.
Location.

Jal Area

R. H. Henderson and others' No. 1 Langlie, C SE SE Section 8-25-37, a wildcat 2½ miles east of the Jal Pool, on acreage assigned to the operators

by the Stanolind Oil & Gas Co. for a test, is attracting attention and looks favorable for some kind of a well. It is drilling in lime at 3,442 feet and had oil shows at 3,378-83 feet and 3,412-17 feet and an increase in gas to 1,000,000 feet at 3,417 feet.

Byrd-Frost, Inc.'s No. 1-A Wells, SE SE NW Sec. 12-25-36.
T.D. 3,338 ft.; set packer at 3,319 ft.; gauged 120 bbls. per day with 5,250,000 ft. of gas.
Byrd-Frost, Inc.'s No. 2-A Wells, SW SW SE Sec. 12-25-36.
Location.
Continental Oil Co.'s No. 12-A-1 Wells, SW NE NW Sec. 12-25s-36e.
T.D. 3,448 ft.; while pulling packer rig collapsed; made 5 bbls. per hr. before treated with 2,000 gals.; flowed 100 bbls. fluid, 60 per cent water, in 8 hrs.
Harry Leonard's No. 1-B Justis, SW NW NW Sec. 20-25-37.
Drlg. 2,430 ft. in anhyd.
Gypsy Oil Co.'s No. 1-B Arnott, NW SW SW Sec. 32-25-37.
T.D. 3,400 ft.; P.B. to 3,240 ft.; perforator hung on 5½-in. at 3,169 ft.; fishing.
Gypsy Oil Co.'s No. 1 Arnott, C NE NW Sec. 2-25-36.
T.D. 3,524 ft.; P.B. to 3,505 ft.; swabbing to test; est. 70 bbls. in 24 hrs.; 10 per cent water.
Gypsy Oil Co.'s No. 1-A Vinson Ramsey, C SE SE Sec. 12-26-36.
Coring at 3,225 ft. in lime; D.S. test at 3,130-45 ft. open 1 hr.; small gas blast and 400 ft. of fluid, 25 per cent oil.
R. H. Henderson et al's No. 1 Langlie, C SE SE Sec. 8-25-37.
Drlg. 3,422 ft. with shows of oil and gas.
R. H. Henderson et al's No. 1 Ogg, C NW NE Sec. 11-25-36.
S.D. 5 ft.
Jeffers Oil Co.'s No. 1 Carlson, C NW SE Sec. 27-25-37.
Drlg. 950 ft. in anhyd.; landed 12½-in. at 920 ft.
Tide Water Oil Co.'s No. 1 Coats, SE SE NW Sec. 31-25-37.
T.D. 3,332 ft.; W.O. pumping equipment; swabbed 120 bbls. per day through 2½-in. at 3,302 ft. on 12/16-in. choke, 15 per cent water.

Hobbs Area

Another big well on the eastern flank of the Hobbs Pool was completed in the Samedan Oil Co.'s No. 1 Byers, CWL NW NE Section 3-19-38, on a lease assigned to the operators by the Stanolind Oil & Gas Co. It gauged 16,105 bbls. of oil, 5 per cent basic sediment and water, and 17,000,000 feet of gas in 24 hours through the casing and 3,210 bbls. and 2,910,000 feet through the tubing after treating with 15,000 gallons of acid. It was given an allowable of 227 bbls. daily. Total depth is 4,200 feet and elevation is 3,615 feet. The 7-inch is at 4,055 feet.

Amerada Pet. Corp. and Skelly Oil Co.'s No. 2-E State, NE NW NW Sec. 24-18s-37e.
R.U.R.
Continental Oil Co.'s No. 4 Grimes, SW NE SE Sec. 28-18-38.
Drlg. 3,309 ft. in lime.
Samedan Oil Co.'s No. 2-B Moom, 1,315 ft. from N line and 1,120 ft. from E line, Sec. 28-18s-38e.
Cellar and pit.
Samedan Oil Co.'s No. 2 Byers, CWL SW NW Sec. 3-19s-38e.
Set 12½-in. at 187 ft., and R.U.R.
Samedan Oil Co.'s No. 1-B State, CEL SE NW Sec. 25-18s-37e.
Drlg. 2,350 ft. in anhyd. and salt.
Samedan Oil Co.'s No. 4-C State, 1,315 ft. from S and W lines, Sec. 24-18s-37e.
Spud. to 208 ft.; set 1⅛-in. on bottom with 135 sacks and shut down.
Gypsy Oil Co.'s No. 4 Graham-State, C NW NE Sec. 24-18-37.
S.D.O. at 4,230 ft.; ran tubing with packer at 4,090 ft.
National Securities Oil Co.'s No. 1 Linam, NE SE SW Sec. 33-18-37.
T.D. 4,506 ft.; P.B. to 4,238 ft.; S.D.O.
Shell Pet. Corp.'s No. 4 Nora Berry, 1,325 ft. W of E line and 1,315 ft. N of S line, Sec. 31-18-38.
Drlg. 4,065 ft. in lime; bailing test at 4,030 gt., one-fourth bbl. per hr.; 7-in. at 3,990 ft. with 250 sacks.
Shell Pet. Corp.'s No. 2 Turner, 1,020 ft. from N line and 2,316 ft. from E line, Sec. 34-18s-38e.
R.U.R.
Shell Pet. Corp.'s No. 2 Rice, C SW SE Sec. 13-18s-38e.
Drlg. 2,028 ft. in salt; top anhyd. 1,580 ft.; top salt 1,736 ft.
Stanolind O. & G. Co.'s No. 11 Capps, C NE SW Sec. 3-19s-38e.
S.D. 1,660 ft. in red beds for 10¾-in.

Lea Area

The Lea area, which so far this year has proven to be a graveyard for wildcats, chalked up another failure when Anderson & Prichard's No. 1 Fisher, C SE NE Section 8-20-35, was plugged and abandoned at 4,454 feet, total depth. It is to the northeast of the Lea Pool, while most of the recent play lies to the west and northwest. It had 4,325 feet of water at 4,375 feet. It was decided to deepen it to 4,500 feet, but a bad fishing job developed at present depth. The elevation is 3,690 feet. It was on a permit assigned by the Stanolind Oil & Gas Co.

Argo Royalty Co.'s No. 2 Burner, C SE SE Sec. 8-20-32.
Drlg. 2,720 gt. in blue shale and shells; top of lime 2,385 ft.
Culberson & Irwin's No. 1 Sue Richards, C SW SE Sec. 10-21s-32e.
Location; bldg. road.
Culberson & Irwin's No. 1 Eva Brown, C NE NE Sec. 23-21s-32e.
Rig.

Caprock Area

Vierson & Brown's No. 1 Robinson, C NW SE Sec. 14s-11s-32.
Standing; rig completed.

Maljamar Area

The Maljamar Oil & Gas Co.'s No. 1 Miller, C NW SW Section 23-17-32, which extends the proven area of the Maljamar Pool 1 mile to the southeast, was completed at 4,170 feet after plugging back from 4,195 feet, for 40 bbls. per day after treating with 2,000 gallons of acid. Top of pay was at 3,980 feet and the elevation is 3,992 feet.

Bernalillo County

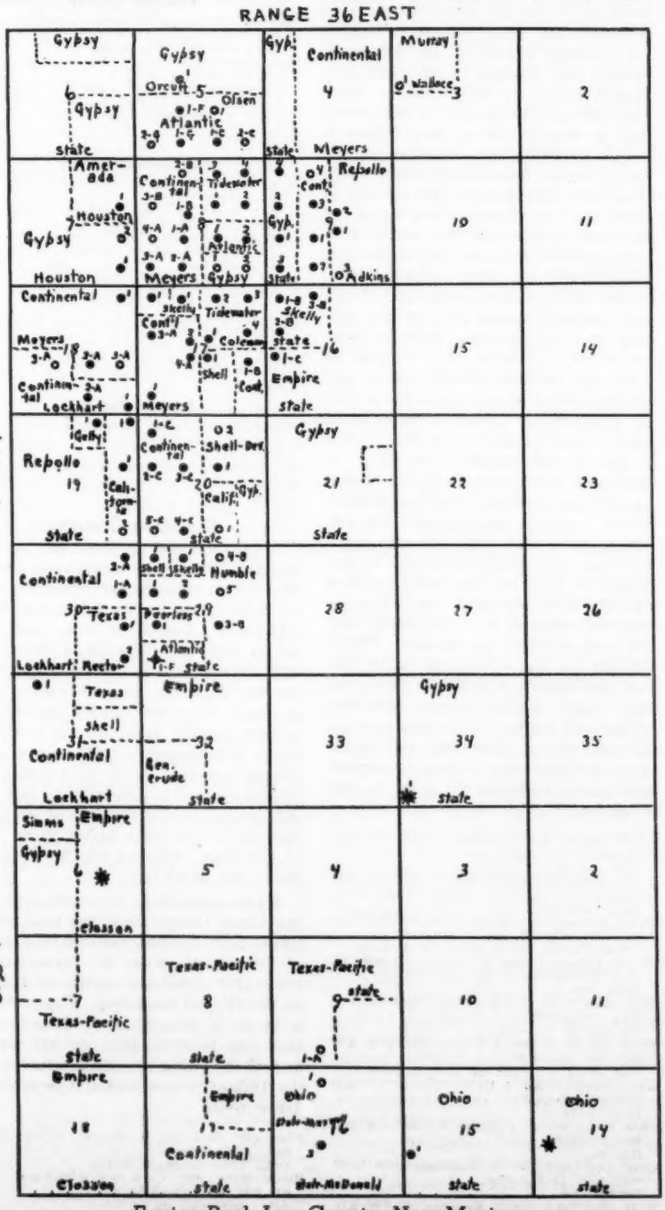
Norins Realty Co., Inc.'s No. 1 Gallegan grant, C NW NW Sec. 19-11n-4e.
T.D. 500 ft.; trying to cement pipe and test show of carbon dioxide gas.

Chaves County

Comanche Drlg. Co.'s No. 2 Sloop-Purcell, C NE NE Sec. 15-11s-26.
Location.
Los Chaves Dev. Co.'s No. 1 Government C NE Sec. 2-8s-23.
Spudded and S.D.
John Tannehill's No. 1 Campbell, NE SE NE Sec. 1-11s-25.
T.D. 801 ft.; preparing to pull pipe.
Warman Oil Trust's No. 1 Weldon & Hoar, NW NW SE Sec. 9-14-25.
Drlg. 1,652 ft. in lime.

Eddy County

Barnsdall Oil Corp.'s No. 2 Dodd, C NE SE Sec. 22-17-29.
T.D. 2,930 ft.; C.O. at 2,720 ft.; will run 1,500 ft. of 2-in. and 1,150 ft. of 2½-in. upset tubing with 2 bottom joints perforated.
R. D. Compton et al's No. 6 Mann, NW SW NE Sec. 4-18-27.
T.D. 960 ft.; fishing.
Coronado Exploration Co.'s No. 1 Anderson, C NE NW Sec. 13-20s-23.
S.D. 1,462 ft.
Dooley & Shanks' No. 1 McClay, C NE SE Sec. 33-18-30.
Drlg. 2,740 ft. in gray lime; top red sand at 2,630 ft.; show of gas at 2,630-40 ft.
Dooley et al's No. 1 Commerce Trust, NW NE SW Sec. 8-20-27.
T.D. 700 ft.; fishing 2 joints of 6¼-in.
Emperor Oil Co.'s No. 2 Puckett, C NW NE Sec. 24-17-31.
Location.
Flynn, Welch & Yates' No. 4 Yates, C SE NE Sec. 6-20-27.
Drlg. 1,715 ft. in gray lime; slight show of oil at 1,501-06 ft.
Getty Oil Co.'s No. 7 Dooley, SW SW NW Sec. 24-20-29.
T.D. 6,052 ft.; R.U.C.T.
R. G. Patillo's No. 1 Thomason, SE SE NE Sec. 12-20-28.
Drlg. 940 ft. in lime and anhyd.
Pecos Valley Gas Co.'s No. 1 Hastie, SE NW NE Sec. 17-17-28.
Drlg. 1,570 ft. in brown lime; small show of gas at 1,367-70 ft.; oil show 1,406-10 ft.
Rampo Oil Co.'s No. 1 State, CNL NE SE Sec. 32-17-28.
S.D. 2,232 ft. in lime.
Red Lake Oil Co.'s No. 5 State, NW NW NE Sec. 27-17s-28e.
Repello Oil Co. and C. J. Dexter's No. 3-X Parke, SE SE SE Sec. 15-17s-30e.
Drlg. 1,530 ft. in sdy. shale.
Tignor, Etz & Keyes' No. 2 Keyes, C NE SW Sec. 10-17-28.
S.D. 990 ft. in anhyd. and gray lime for engine repairs.
Van P. Welch's No. 1 State, 320 ft. out of NW cor. Sec. 23-17s-28e.
R.U. machine.



Otero County

Flynn, Welch & Yates' No. 1 Donahue, C NW NE Section 28-24-15, Sacramento River district, was plugged and abandoned at 1,692 in granite.

DeBaca County

Ralph Burlingame et al's No. 1 Woods, NE SW SW Sec. 6-4n-20e.
T.D. 4,622 ft.; M.I. cable tools to complete.

Guadalupe County

Anton Chico Dev. Co.'s No. 2 fee, NW NE SW Sec. 20-9n-17.
S.D. 900 ft.; changing over to cable tools.

McKinley County

Bennett & Lingfelter's No. 1 Lark Drlg. Co., NE NE NW Sec. 29-20-9w.
S.D. 560 ft. in sand; est. 20 bbls. daily at 469-72 ft. and 554-60 ft.
A. C. Kittel's No. 1, NW NW Sec. 32-20-9w.
Material on ground.
R. W. Sanderson et al's No. 1, NE SW Sec. 21-20-9w.
Material on ground.
David K. Stacey's No. 2 Webber, SW NW Sec. 29-20-9w.
Rig on ground.

Quay County

Quay County Dev. Co.'s No. 1, C SE SW Sec. 19-9n-33e.
Drlg. 600 ft.; show of gas.

Rio Arriba County

El Vado Structures Property Co., Ltd.'s No. 1-A Tierra Amarilla grant, NE Sec. 26-2s-1e (unsurveyed).
Rigging.

Roosevelt County

Claudell Dev. Co.'s No. 1 Wilmes, C SW SE Sec. 21-2s-30.
T.D. 3,655 ft.; P.B. to 3,385 ft.; shot at 3,380 ft. to part 5 and 6-in.; will rerun 6-in. to 3,340 ft. and acidize at 3,340-60 ft.
R. M. Hancock et al's No. 1, 33 ft. from W line and 1,000 ft. from N line, Sec. 21-1n-37.
Drlg. below 200 ft.

Sandoval County

Continental Oil Co.'s No. 1 L-Bar Cattle Co., 630 ft. N of E ¼ cor. Sec. 8-13n-4w.
Drlg. 2,490 ft., red shale.

San Miguel County

Cabra Springs O. & G. Co.'s No. 1 Thompson, SW NE NE Sec. 22-12n-22e.
Drlg. 4,067 ft.
Cabra Springs O. & G. Co.'s No. 2 West Pino Mesa, SW SW SW Sec. 31-12-22.
Drlg. 760 ft.
Pioneer Oil Co.'s No. 2 Montezuma, CSL SE SW Sec. 14-15n-16.
Drlg. 300 ft.
Starr-Kennedy Oil Co.'s No. 3 Adams, NE NE SE Sec. 25-17-16.
Standing at 5,090 ft. after completing rig; to resume following fire.
Holmberg Interests' No. 1 Cantwell, NW NW NW Sec. 5-10n-9e.
S.D. 810 ft. (corrected).
Kelsey Clients Dev. Estate's No. 2 State, C NW Sec. 22-10n-10e.
S.D. 1,460 ft.

San Juan County

Aztec Coop. Oil Co.'s No. 1 Aztec, SE SW Sec. 10-30n-11w.
Material on ground.
J. F. Cross et al's No. 1 Wilson, SW SW SE Sec. 17-30-11w.
S.D. 810 ft.
J. F. Cross' No. 6 Duggan, NE NE NE Sec. 20-30-11w.
S.D. 647 ft.
Cross & Poole's No. 1 Aztec, Sec. 1-30-11w.
Making water shutoff at 740 ft.
A. E. Haney's No. 1 Hare, SE SE Sec. 14-30-11w.
Drlg. 680 ft.
Kutz Canon O. & G. Co.'s No. 1 Day, SW SW SW Sec. 20-28-10.
Drlg. 4,389 ft.; increase in gas.
R. C. Oswell's No. 4 Government, SW NW NE Sec. 34-30-11w.
S.D. 1,790 ft.
R. C. Oswell's No. 6 Government, SE NE Sec. 33-30-11w.

Spudded and S.D.
Phillips & Spence's No. 2 Martin, NW SE SW Sec. 34-30n-11w.
Drlg. 1,110 ft. in shale; 8¼-in. at 30 ft.; 5 3/16-in. at 720 ft.
Reserve Oil Co.'s No. 6 Shaffer, SE NE SE Sec. 36-22n-14w.
Location.
San Juan Pet. Co.'s No. 1 Lemley, NE SE SE Sec. 32-30-11w.
S.D. 1,314 ft.
Nick Spatter's No. 1 fee, C NE SW Sec. 32-31-11w.
U.R. 8¼-in. to 1,480 ft.; drlg. at 1,500 ft.
H. C. Stratton's No. 1 Hart, SW NE SE Sec. 25-30-12w.
Abd. at 1,680 ft.
W. R. Webb's No. 1 fee, CEL NE NW Sec. 6-30-11w.
P.B. from 1,500 ft. to 1,350 ft.; set pipe and preparing to test.

Torrance County

48 Pet. Co.'s No. 1 Greenfield, C NW SW Sec. 17-9n-8e.
Drlg. 550 ft.; landed 10-in. at 400 ft.

Union County

Sierra Grande Oil Corp.'s No. 1 Rogers, C NE SW Sec. 4-29-20.
T.D. 2,615 ft.; running 8¼-in.; more gas, est. 500,000 ft.; total gas est. 1,500,000 ft.

Valencia County

Pres-Sel Dev. Co.'s No. 1 Morris, SE NE Sec. 30-12n-10w.
Drlg. 600 ft.
Ringle Dev. Co.'s No. 2 Tome grant, C NE SE Sec. 20-6n-3e.
Rigged and S.D.
Ringle Dev. Co.'s No. 1 Tome grant, C SE SE Sec. 36-6n-3e.
S.D. 400 ft.
Western Natural Resources Corp., Inc.'s No. 2 San Clemente, SE SE NW Sec. 5-6n-1e.

COLORADO

Adams County

Riddle Pet. Co.'s No. 1 Baxter, C SW Sec. 2-3s-66w.
Standing partly rigged and drlg. wtr. well; T.D. 940 ft.; 6¼ in. cmt. at 900 ft.; drlg. plug.

Archuleta County

Wm. E. Hughes Est.'s No. 1 fee, SW Sec. 24-33n-2e (unsurveyed).
Drlg. 300 ft.
Oil City Pet. Co.'s No. 1-A Garnett, NW NE SW Sec. 25-33n-2e.
Drlg. 1,200 ft. with show of new oil; drillers est. 60 ft. to top of Muddy.
Navajo Oil Co.'s No. 1 Crowley, SW SW NE Sec. 11-32n-1e.
Resumed at 527 ft.; 5⅝-in. set at 527 ft.

Baca County

J. H. Everett et al's No. 1, 330 ft. NW cor. Sec. 24-32-48.
Spudded wtr. well.

Boulder County

Leslie R. Steele et al's No. 1 Maxwell, SW NE NW Sec. 24-1n-71.
Drlg. 1,495 ft.

Elbert County

Ramsey Pet. Corp. and C. E. Lambert's No. 1, near C Sec. 12-8s-57w.
Cellar.

Fremont County

Waterville Oil Co.'s No. 1 State, SE SE NW Sec. 16-18s-69w.
T.D. 2,780 ft.; 150 ft. of oil in hole; U.R. 6-3/16-in. at 2,750 ft.

Grand County

Colorado Oil Ref. Co.'s No. 1 Linke, NE SW NW Sec. 12-1n-77w.
Drlg. 2,100 ft. with good show of gas.
Interstate O. & G. Co.'s No. 1 Hinman, NE SE NW Sec. 11-2n-81.
S.D. 2,997 ft.

Huerfano County

S. W. Pressey's No. 1 Ojo, SW NE Sec. 10-26-69.
S.D. 2,550 ft.

Jackson County

Colorado Oil Ref. Co.'s No. 1 North Park Coal, NW NW Sec. 18-9n-78.
T.D. 1,805 ft.; reamed to 500 ft. and running 15½-in.
Continental Oil Co.'s No. 2 Hoye, NW NW NE Sec. 34-9n-78.
T.D. 2,540 ft. in broken lime; reamed from 2,540 to 2,658 ft.

Jefferson County

Ruby Hill O. & G. Co.'s No. 1 Braden, SE cor. Sec. 24-4s-69.
S.D. 4,230 ft.

Las Animas County

Mountain States Oil Corp.'s No. 1 Nickola, C NE SE Sec. 10-34-62.
S.D. 1,640 ft.

Lincoln County

Consolidated Smelting & Metals Co.'s No. 1 Hancock, NE NE SW Sec. 7-17s-52.
C.O. and deepened to 1,610 ft., hole caving badly.

Moffat County

Stanolind O. & G. Co.'s No. 5-S Parkinson, NW cor. SE Sec. 22-4n-92.
Derrick up; waiting on tools.
Texas Co.'s No. 2 Iles Investment, 620 ft. S of N line, and 220 ft. E of W line, Lot 4, Sec. 23-4n-92.
Drlg. 3,699 ft.; top Frontier 2,465 ft.; top Dakota 2,834 ft.
Mountain Fuel Supply Co.'s No. 1 Murdock, SE SE NE Sec. 24-12n-101.
Some material on location.

Montezuma County

McElmo Oil Co.'s No. 1 West, NE NW NE Sec. 31-36n-17w.
T.D. 3,131 ft.; running 4½-in. and C.O. at 2,730 ft.; oil tests 44.1 gravity.

Morgan County

Swisher et al's No. 1 Lunt, 92 ft. W of E line and 360 ft. N of S line, Sec. 3-4n-60.
T.D. 820 ft.; more wtr. at 810 ft.; will run 4½-in.

Park County

South Park Oil Co.'s No. 1 State, SE SE SW Sec. 19-11s-75.
Drlg. 2,020 ft.; showing sufficient gas to burn 4 ft. above casinghead.

Prowers County

Trojan O. & G. Co.'s No. 1 Lotus Oil, NW NE NE Sec. 15-23-46.
Drlg. below 5,227 ft.

WYOMING

Albany County

California Co.'s No. 2 Holst, SW NE SE Sec. 13-17n-77.
S.D. 510 ft.; repairing engine.
California Co.'s No. 1 Wilson, NW SW SW Sec. 18-17n-76.
Spud. July 19; drlg. 127 ft.
Ohio Oil Co.'s No. 1 Two Rivers Land & Cattle, SW SW NE Sec. 8-17-74.
Drlg. 1,300 ft.

Big Horn County

After an unusually long run of bad luck, the Taylor Oil Co.'s No. 1 Hoskins, Lot 5, Section 25-56-97, in a fault block at the south end of the Byron Dome, has cleaned out to bottom at 5,275 feet and again is making hole. This test spudded in January, 1933, with the intention of going to Frontier for green oil. It is located on a small island in the Shoshone River. The moving in of equipment began early in 1932, but a flood washed out the bridge to the island and it was nearly a year before it began spudding. Zero weather hit the camp almost immediately after spudding and after landing the 20-inch at 52 feet, it shut down. Then when the weather moderated, the water rose and again washed out the bridge and road. It was the middle of June, 1933, before work could be resumed. Drilling then went ahead without any mishap and in January, 1934, a sand above the Frontier was topped at 2,376 feet showing 500,000 feet of gas and 6 bbls. of 56 gravity crude a day. At 2,687 feet it topped a water sand and it was decided to make it into a test to the Madison limestone. A deal was made with S. H. Keoughan to move in a rotary from the Midway Dome. Another run of good luck followed until the hole reached 5,275 feet last fall, close to the top of the objective. Then the hole went crooked and the drill pipe was lost. After recovering most of it, a whipstock was set and drilling by started. While drilling by, the drill stem again was lost and before it could be recovered the floods again washed out the bridge and roads. Two weeks ago the repairs were completed and since then the hole was cleared to bottom and again it is on its way to the objective.

J. W. Bales' No. 1 Parker, C SW SW Sec. 22-49-89.
S.D. 125 ft.
Peter Evanoff's No. 1 Griffin, Lot 60, Sec. 4-55-97.
S.D. 1,594 ft.
Peter Evanoff et al's No. 1 McAllister, Lot 40, NW NE SE Sec. 3-55n-97w.
Drlg. 170 ft.; set 3 joints of 15½-in.
W. S. Gilbert's No. 1 Zaring, SE SE SE Sec. 35-52n-93w.
Drlg. 500 ft.
McAlpine O. & G. Co.'s No. 2, SE SE NW Sec. 3-55n-97w.
Moving in materials.
Ohio Oil Co.'s No. 2 Sidan Canal, C SW SW Sec. 24-56-97.
T.D. 5,264 ft.; running 7-in. to 5,054 ft.
Ohio Oil Co.'s No. 4 Byron Union, SW NE NE Sec. 22-56-97.
Drlg. 3,705 ft.
Ohio Oil o.'s No. 4 Byron Union, SW NE Sec. 22-56-97.
Rig up.
Ohio Oil Co.'s No. 3 Sessions, NW NW NW Sec. 33-56n-97w.
Derrick up.
J. H. Shaffer's No. 1 Keachie, C SW SW Sec. 7-49-91.
Drlg. 1,000 ft.; wtr. sand at 700-30 ft.
Taylor Oil Co.'s No. 1 Hoskins, Lot 5 (SE SE), Sec. 25-56-97.
C.O. to bottom at 5,275 ft. and making new hole.
Wyoming O. & R. Co.'s No. 1 Evans, NE NE NW Sec. 12-49-91.
Set 12¾-in. at 85 ft. (cor.) and S.D.

Carbon County

Ohio Oil Co. and California Co.'s No. 2 State, C NW NW Sec. 36-21n-79w.
Drlg. 1,475 ft.
Ohio Oil Co. and California Co.'s No. 1 Union Pacific, Acct. 1, NE SW NW Sec. 25-21n-79w.
Derrick up; W.O. tools.
Ohio Oil Co.'s No. 4 Diamond Cattle, SE SW NW Sec. 35-20-78.
Drlg. 3,090 ft.
General Pet. Corp.'s No. 1 Whitford, SW SE SE Sec. 24-20-84.
T.D. 4,383 ft.; C.O.
General Pet. Corp.'s No. 1 Union Pacific, C SW SW Sec. 19-20-83.
S.D. 5,931 ft.; may be deepened.

Converse County

Chadron-Osage Oil Co.'s No. 1 State, SW cor. Sec. 16-32-69.
Show of oil in sand at 695-635 ft.; U.R. 15½-in. to 700 ft.
Continental Oil Co.'s No. 60 State, NW SW NE Sec. 9-33-76.
Rigging.
Continental Oil Co.'s No. 9 Whiteside, 2,650 ft. S of N line and 1,072 ft. W of E line, Sec. 7-33-76.
Drlg. 2,980 ft.
Otto Olson et al's No. 1 Carey, Sec. 6-32-74.
S.D. 642 ft.
John Ackard's No. 1 Daniels, SW SW SE Sec. 17-32-71.

Crook County

Dr. R. B. Kinter's No. 1 Rockford-Wyoming, CNL NE SE Sec. 13-52n-62w.
Drlg. 1,330 ft.; top of Whitewood at 1,300 ft.; will run 5-3/16-in. and test.

Fremont County

Mid-American Oil Co.'s No. 3 Government, NW NE SW Sec. 24-28-92.
Drlg. 320 ft.; 12½-in. at 125 ft.
Monongahela Oil Co.'s No. 1 Wisda, NE SE SE Sec. 13-28-93.
Preparing to core at 4,050 ft.; base Wall Creek at 3,720 ft.; top of Mowry 3,905 ft.
Nelson & Poupiert's No. 5 Enos, Lot 7, Sec. 27-3n-1w.
Drlg. 150 ft.

Hot Springs County

Argo Oil Co.'s No. 16 Ellen, NE SE NW Sec. 14-44-98.
T.D. 2,683 ft.; R.U. for pumping test from Embar.
Argo Oil Co.'s No. 1 Rathvon-Government, NE SW NW Sec. 14-44n-98w.
Drlg. 250 ft.
California Exploration Co.'s No. 2 Government, NW SW NW Sec. 7-44-96.
Drlg. 2,518 ft.
Ohio Oil Co.'s No. 72 Millsiron Cattle Co., NE SE SE Sec. 19-46n-98w.
Bldg. derrick (cor.).
Oscar G. Grace's No. 1 Government, SW NW NW Sec. 21-43-92.
Drlg. 365 ft.

Lincoln County

Senrab Oil Co.'s No. 3 Government, N SE NW Sec. 10-26-113.
S.D. 1,011 ft.
Superior-Wyoming Oil Co.'s No. 2-B, Lot 3 (NE NW), Sec. 3-26n-113w.
Drlg. 700 ft.

Niobrara County

A location for another well to the third Sundance in the Lance Creek Field was released this week by the Ohio Oil Co. in its No. 7 Lamb, C NW NE Section 5-35-65. It is an east offset to Argo Oil Co.'s No. 4 Elliott, a drilling well and in the same forty as its No. 2 Lamb, an old well being deepened from the Dakota and which is now testing. Ohio Oil Co.'s No. 2 Lamb is bottomed at 3,707 feet in the second Sundance, with the 4¾-inch at 3,642 feet, and is swabbing to test. It will not go to the third sand at this time as it is a south offset to its No. 4 Converse Sheep, which stopped above the third pay.

A new subsurface structure map of the Lance Creek Field has been published by Petroleum Information, Inc., of Denver. It shows the ownerships, wells and structural contours drawn on the Dakota sandstone. The geology is by C. E. Shoenfelt. Accompanying the map is well data on all wells drilled including the old producers in the Dakota series and the new Sundance wells.

Argo Oil Co.'s No. 4 Elliott, C NE NW Sec. 5-35n-65w.
Drlg. 2,770 ft. sandy shale.
Black Hills Ref. Co.'s No. 1 Wright, SE SE SW Sec. 23-36-94.
Some material on location.
Continental Oil Co.'s No. 2 Schuricht, C SE NE Sec. 9-35-65.
Coring dry sand and shale at 3,697 ft.
Continental Oil Co.'s No. 5 Rholff, 550 ft. E of W line and 580 ft. N of S line, SW Sec. 31-36n-65w.
Derrick up.
Interstate O. & R. Co.'s No. 1 Morrell, NW NE SE Sec. 9-39-61.
T.D. 3,030 ft.; P. B. to 2,835 ft. and preparing to acidize.
Fall River Royalty & Producers Co.'s No. 3-I, CEL NE NE Sec. 3-39-61.
T.D. 385 ft.; shot, and testing.
Fall River Royalty & Producers Co.'s No. 5-L, Briggs, CSL NE NE Sec. 2-39n-61w
Drlg. 210 ft.; show of oil at 220 ft. in Muddy.
Ohio Oil Co.'s No. 7 Lamb, C NW NE Sec. 5-35n-65w.
Ohio Oil Co.'s No. 2 Lamb, NE NW NE Sec. 5-35-65.
T.D. 3,707 ft.; 4¾-in. at 3,642 ft.; swabbing to test upper Sundance.
Ohio Oil Co.'s No. 4 Putnam, C SW SW Sec. 33-36-65.
Derrick up.
S. & H. Dev. Co.'s No. 1-A Olinger, SE NE NW Sec. 1-36-63.
T.D. 1,550 ft.; U.R. 5-3/16-in. to bottom.

Park County

Geo. T. Beck's No. 1 fee, NW SE NW Sec. 27-33-101.
Resuming at 1,181 ft.
Continental Oil Co.'s No. 3 Northern Pacific, NW SE SE Sec. 23-58-98.
Coring at 2,948 ft.; 7-in. cmtd. at 2,911 ft.
Garland Oil Co.'s No. 2 Government, SE NE NW Sec. 14-56-98.
S.D. 2,166 ft.
V. M. Kirk's No. 1 Connaghan, C NW SW Sec. 10-50-100.
Drlg. 500 ft.
Resolute Oil Co.'s No. 1 State, C NW SW Sec. 16-57-101.
S.D. 3,608 ft.

Sheridan County

Beaver Creek Oil Synd.'s No. 1 Allison, SW SE Sec. 15-55-85.
S.D. 2,660 ft.

Sublet County

Texas Co.'s No. 5-K, SE SE SW Sec. 34-27-113.
Cmtd. 7-in. at 631 ft.
Piney-LaBarge Oil Co.'s No. 2 Government, CEL NE NW Sec. 18-28-113.
Drlg. below 520 ft.

Sweetwater County

Wyoming-California Pet. Co.'s No. 1 Government, SE cor. Sec. 20-16-104.
Drlg. 2,285 ft.

Uinta County

General Pet. Corp. of Utah's No. 1 Union Pacific-Hayes, SW NW SW Sec. 29-14n-118w.
Resumed at 950 ft.

Washakie County

C. L. Brome et al's No. 3 Government, SW NW NW Sec. 31-48-90.
T.D. 1,300 ft.; running 8¼-in.
Nystrom & Smoot's No. 2 State, SW NE NE Sec. 36-48n-90w.
Spudding at 60 ft.
Wyoming O. & R. Co.'s No. 1 Frison, NW SW NW Sec. 14-48-91.
S.D. 1,700 ft.

Weston County

One completion was reported in the Osage Field in the Federal Oil Co.'s No. 7, C SE SE Section 15-46-64, which is flowing 20 bbls. a day from the pay at 2,136-40 feet. It will be shot later.

Conway Oil Corp.'s No. 1 Government, C SE NW Sec. 7-41-60.
Drlg. 2,047 ft.
Karl Kundy's No. 9 Government, NW cor. NE Sec. 31-46-63.
Drlg. at 1,300 ft.
Beaver Creek Oil Synd.'s No. 1 State, C NE NE Sec. 23-44-63.
Drlg. 150 ft.
La Lleisihe Oil Co.'s No. 18 fee, C SW SW Sec. 17-46-63.
Drlg. 500 ft.
Updike Bros.' No. 5, CEL NE SW Sec. 25-46-64.
Sand at 1,660-64 ft.; will shoot and complete.

MONTANA

The Ohio Oil Co. reduced the posted price of crude oil in the Kevin-Sunburst Field in northern Montana, effective July 19, from $1.35 to $1.20 per barrel. This is the first change by this agency since September 29, 1933. This action followed that of the Big West Oil Co. on July 1 in posting a price of $1.15 to $1.25, based on gravity. The International Refining Co., which heretofore has not posted a field price, announced that it will pay $1.20 for its purchases, effective July 19. The buyers have been curtailing their purchases the past month and it looks as if the field will go under proration unless

the operators and the buyers can get together.

Big Horn County

Daniels Pet. Co.'s No. 1 May, C SE SE Sec. 13-1s-33e.
Drlg. at 400 ft.
Enterprise Oil Co. et al's No. 2 Lynde, SW SW SE Sec. 21-6s-35e.
Drlg. 3,681 ft.

Carbon County

Bailey Round Butte Oil Co.'s No. 1, 1,120 ft. W of E line and 2,140 ft. N of S line, Sec. 3-6s-23.
Drlg. 954 ft.
Ohio Oil Co.'s No. 15 Montana Industrial, C NE NE Sec. 11-7s-21.
T.D. 4,345 ft.; will complete as gas well in Frontier; 8⅝-in. at 3,970 ft.

Cascade County

C. Leonard Smith's No. 1, NE NE SW Sec. 14-22n-2e.
Fort Worth spudder on location.

Choteau County

Mills & Decker's No. 1, NE NW Sec. 29-27n-13e.
Spudding.

Fergus County

Button Butte O. & G. Co.'s No. 1 Woodward, SE SE SW Sec. 20-14n-24.
Drlg. 3,095 ft.
Emmons et al's No. 1, 220 ft. W. of E line and 2,140 ft. N of S line, Sec. 6-20-18.
Drlg. 1,100 ft.
S. W. Pennock et al's No. 1 Nordheim, NW NE NE Sec. 6-21n-18e.
S.D. 480 ft.; (corrected).

Gallatin County

Montana Gas & Pet. Corp.'s No. 1 Adams, SE SE SE Sec. 36-2n-1e.
Drlg. 2,310 ft.
Ben W. Ryan's No. 1 Tice, NE NE NE Sec. 28-1n-2e.
Drlg. 2,015 ft.

Glacier County

Two completions, neither of which has been gauged, and four new locations were reported in the Cut Bank Field. The Par Oil Co.'s No. 5 Haines, C SW SE Section 2-34-6w, had 1,000 feet of oil from the pay at 2,834-57 feet and is preparing to pump. Total depth is 2,871 feet. Montana Power Gas Co.'s No. 1 Garrigeaux, C SE NW Section 28-3-5w, had 450 feet of oil from the pay at 3,041-55 feet. Total depth is 3,057 feet.

Anderson's No. 2 Anderson, NW SE NW Sec. 26-35-6w.
Drlg. 2,540 ft.
Askins' No. 1 Askins, Lot 24, Blk. 33, Sec. 12-33-6w.
S.D. 2,700 ft.; will start sidetracking at 2,021 ft.
C. P. Castle's No. 2 State, 600 ft. N of S line and 1,320 ft. E of W line, Sec. 36-35-6w.
Drlg. 2,700 ft.
A. B. Cobb's No. 1 Young, C SE NE Sec. 5-32-5w.
Cmtd. 7-in. at 2,800 ft.; S.O.
Consolidated Gas Co.'s No. 2 State, C NW SE Sec. 26-35-6w.
Drlg. 1,210 ft.
Consolidated Gas Co.'s No. 8 Tribal, Lot 6, Sec. 10-34-6w.
Drlg. 2,700 ft.
Consolidated Gas Co.'s No. 7 Tribal, Lot 5 (NW NE), Sec. 10-34n-6w.
Drlg. 650 ft.
Consolidated Gas Co.'s No. 1 Arnold-State, C SW NE Sec. 26-35-6w.
Cmtd. 7-in. at 2,794 ft.; S.O.
Custer Oil Co.'s No. 1 Tweedy, 440 ft. from W line and 330 ft. from N line, NE Sec. 36-33n-6w.
Drlg. 550 ft.
Goodstein & Smith's No. 1 Olson, C NE SE Sec. 26-34-6w.
Drlg. 600 ft.
Grant Oil Co.'s No. 1 Bakke, C NW NE Sec. 32-34-5w (formerly R. C. Jeffries).
Drlg. 2,025 ft.
L. R. Hannah, trustee's No. 2 State, 93 ft. from E line and 158 ft. from N line, Sec. 12-33n-6w.
Rig on loc. (first report).
Kately's No. 1 Thornson, SW NW SW Sec. 25-36-6w.
T.D. 2,791 ft.; 1,800 ft. of oil in hole with 2,000,000 ft. of gas.
Lawler & Hoer's No. 1 Downen, C SE SW Sec. 9-33-5w.
Drlg. 2,180 ft.
Montana Headlight Oil Co.'s No. 2 Britton, 660 ft. E of W line and 440 ft. N of S line, SE Sec. 11-34n-6w.
Drlg. at 300 ft.
Montana Power Gas Co.'s No. 1 Colburn, C SE SW Sec. 5-33n-5w.
Moving in material (first report).
Montana Power Gas Co.'s No. 1 Clapper Unit, SW SW SW Sec. 27-35n-5w.
Spudding 260 ft.
Montana Power Gas Co.'s No. 2 Bonnett, S SW NW Sec. 4-32-5w.
Drlg. 1,950 ft.
Olive Oil Co.'s No. 4 Winkler, 725 ft. S of N quarter cor. Sec. 35-35-6w.
Drlg. 1,790 ft.
Santa Rita O. & G. Co.'s No. 2 McCabe, NW SE NE Sec. 31-33-5w.
Location.
Santa Rita O. & G. Co.'s No. 1 Stahl, C NW SE Sec. 20-33-5w.
Drlg. 1,115 ft.
Santa Rita O. & G. Co.'s No. 1 Savage, C NW SW Sec. 9-33-5w.
Drlg. 2,025 ft.
Santa Rita O. & G. Co.'s No. 5 Tribal, C SW NW Sec. 15-35-6w.
Drlg. 2,805 ft.; hole caving.
R. C. Tarrant's No. 2 Getty, NW NW SE Sec. 2-34-6w.
T.D. 2,700 ft.; will skid rig.
R. C. Tarrant's No. 4 Britton, C SW SW Sec. 12-34-6w.
Rig on location.
R. C. Tarrant's No. 6 Haglund, Jr., C SE NW Sec. 13-34-6w.
Rig on location.
R. C. Tarrant's No. 2 Larson, C W½ W½ NE Sec. 12-34-6w.
Location.
R. C. Tarrant's No. 1 O'Brien, C SE SW Sec. 29-34-5w.
Drlg. by bit at 2,630 ft.
R. C. Tarrant's No. 2 McClellan, C NW SE Sec. 12-34-6w.
Drlg. 335 ft.
R. C. Tarrant's No. 1 Ruetten-Wold, C NW NE Sec. 13-34-6w.
T.D. 2,640 ft.; straightening crooked hole at 2,640 ft.
Texas Co.'s No. 1 Morgan, C NE NW Sec. 33-33-5w.
T.D. 3,000 ft.; cmtd. 7-in.
Texas Co.'s No. 2 Yunck, C SE SW Sec. 14-35-6w.
T.D. 2,812 ft.; cmtd. 7-in.
Texas Co.'s No. 1 Small, C NW NE Sec. 23-35n-6w.
Moving in rotary rig (first report).
Texas Co.'s No. 1 Tweedy, C N½ NE Sec. 21-35n-6w.
R.U.R. (first report).

Liberty County

John Wilde's No. 2-A Mahoney, W SE SW Sec. 23-27-4e.
Drlg. 1,543 ft.; S.O. in Bow Island sand.

Petroleum County

Hardendorf & Keyes' No. 1 Asted, SW NW SE Sec. 22-13n-28e.
Spudded and S.D.

Phillips County

Little Rocky Dev. Co.'s No. 1, SE SE SE Sec. 17-24-24.
S.D. to finance at 352 ft.

Pondera County

Norden Corp., Ltd.'s No. 1 Hollam, NW NW NW Sec. 12-28n-6w.
S.D. at 500 ft. to complete leasing.
Texas Co.'s No. 1 Unit 5, C SW SW Sec. 3-30-5w.
Drlg. 1,930 ft.

Rosebud County

Birney O. & G. Co.'s No. 1, SW SW SW Sec. 7-6s-43e.
Drlg. 500 ft.

Stillwater County

Continental Oil Co. has made a location for a test on the Ingersoll structure in Stillwater County in its No. 1 Parker, SW SE Section 25-5s-17e, 6 miles to the east and south of its No. 1 Orr, a drilling well. The new operation, for which cellar has been dug, is on the southern end of the Stillwater anticline and on acreage assembled by Purdy & Jones, of Billings, and acquired by the Stanolind Oil & Gas Co. The well will not be a joint operation, but will be drilled by the Continental company on its own account.

Continental Oil Co.'s No. 1 Parker, 500 ft. N of S line and 660 ft. E of W line, SE Sec. 25-5s-17e.
Cellar and pits.
Continental Oil Co.'s No. 1 Orr, SW NW SE Sec. 18-5s-17e.
T.D. 2,953 ft.; stdg. cmtd.

Toole County

Three completions and one new location were reported in the Kevin-Sunburst Field. McKnight & Stock's No. 2 State, SW NW NW Section 16-35-2w, made 25 bbls. a day initial from the contact at 1,572-75 feet and will acidize. E. B. Coolidge's No. 2 O'Haire, NW NE SE Section 35-26-2w, was shot with 80 quarts at 1,537-43 feet and oil rose 1,300 feet. It is rated at 60 bbls. initial. Graham Oil Co.'s No. 2 McDonald, CEL SE SW Section 19-35-2w, had the Sunburst at 1,280-1,310 feet and the contact at 1,526-32 feet and made 8 to 10 bbls. It will acidize.

A. Beardsley's No. 4 Swears, SE SE NW Sec. 9-35-2w.
Drlg. 400 ft.
Coolidge & Coolidge's No. 2 Government, SW NE SE Sec. 35-36-2w.
Loc. (first report).
A. C. Crumley's No. 6 Shaw, SW NW SE Sec. 35-26-2w.
Drlg. 1,000 ft.
Crumley & Son's No. 4 Fryberger, SW SE SE Sec. 24-35-3w.
Drlg. 300 ft.
P. L. Eddy's No. 5 Seabrook, NE SW SW Sec. 19-35-2w.
Location.
Fraser & Kluth's No. 1 Severance, C SE NE Sec. 29-32-2e.
Drlg. 1,621 ft.
Imperial Oil Co.'s No. 16 Craig, C NW NE Sec. 19-35n-1w.
Drlg. 1,300 ft.
T. P. Kyle's No. 1 Clark, SW SW SE Sec. 19-37n-1e.
Drlg. 1,275 ft.; 10-in. at 1,030 ft.
Monopeg Oil, Ltd.'s No. 3 Dipple, S SW NW Sec. 28-35-1w.
S.D. 1,355 ft.; rigging new machine.
Mon-Tex Pet. Co.'s No. 1 fee, NW SW 27-34-1w.
Drlg. 1,250 ft.; S.O.; (loc. cor.).
E. O. Reickhoff's No. 2 Government, SW SW NE Sec. 3-35-3w.
Drlg. 250 ft.
Pfabe & Engleking's No. 8 Seabrook, SE SW SE Sec. 19-35-2w.
Small well at 1,519-29 ft.; will acidize.
C. Leonard Smith's No. 1 Eckhoff, C SE Sec. 6-33n-2e.
S.D. 575 ft. for new boiler.
C. Leonard Smith's No. 1 Federal Land Bank, C NE SE Sec. 11-33n-1e.
Spudding at 175 ft.
C. Leonard Smith's No. 1 I. Halverson, C NE SE Sec. 18-33n-2e.
Drlg. 1,000 ft.; showing 1,000,000 ft. gas.
C. Leonard Smith's No. 1 H. Halverson, NW NE Sec. 18-33n-2e.
Rigging up rotary at 250 ft.
Texas Co.'s No. 10 Bruins, C S½ SW Sec. 10-35n-2w.
Drlg. 375 ft.; 10¾-in. at 132 ft., 15 sacks (loc. cor.).

UTAH

Daggett County

Mountain Fuel Supply Co.'s No. 2 Murphy, NE NE Section 21-3n-24, a test to the Sundance on the Clay Basin structure, which had a total of 32,000,000 feet of gas in the Dakota series before shutting down for the past winter, had water in the upper benches of the Sundance and is shut down for orders at 6,757 feet. Water was encountered in the first bench at 6,602 feet and in the second bench at 6,757 feet. Whether it will be deepened to the third bench from which the largest production comes in the Wyoming fields, or be completed as a gas well, has not been decided.

Mountain Fuel Supply Co.'s No. 2 Murphy, NE NE Sec. 21-3n-24w.
S.D.O. 6,757 ft. in 2nd Sundance.

Summit County

Longwell Pet. Co.'s No. 1, SE SW SE Sec. 35-3n-5e.
Resuming at 850 ft.; trying to U.R. 10-in. to bottom to shut off wtr.

Utah County

Diamond Oil Co.'s No. 4 Government, CSL SE NW Sec. 16-8s-5e.
Drlg. 3,735 ft.; showing considerable gas.

Washington County

Arrowhead Pet. Co.'s No. 2 Escalante, NW NW NE Sec. 19-43-15.
T.D. 4,114 ft.; P.B. to 3,250 ft.; shot and C.O.
Arrowhead Pet. Co.'s No. 1-A, SE SW NE Sec. 1-43-15.
Drlg. 1,400 ft.

Louisiana Royalty

BATON ROUGE, La., July 29.—The state treasury was $64,694.73 richer as the result of payment by Texas Co. of a royalty check on state leases at Lake Barre and Caillou Island, Terrebonne Parish. Receipt of the royalty check, the largest single check from oil royalties ever received by the State, was announced by Loucille May Grace, register of the state land office.

Survey of Chemistry

Ninth edition of the "Annual Survey of American Chemistry," edited by Clarence J. West, director of research information of the National Research Council, reviewing all developments of the chemical field that have taken place in the year of 1934 is now available. This latest edition is divided into 25 chapters, 12 of them being devoted to industrial topics.

One chapter is devoted to the most recent chemical developments within the petroleum industry. One of the major items of the chapter is the review of the research done on knocking, gum formation, and volatility.

"Annual Survey of American Chemistry" may be purchased from its publishers: The Reinhold Publishing Co., at 330 West Forty-second Street, New York City.

Rate Rehearing Asked by Lone Star Gas Co.

AUSTIN, Tex., July 29.—The Third Court of Civil Appeals here substituted its own judgment for that of a trial jury in holding a 32-cent gas gate rate reasonable for communities served by Lone Star Gas Co., the company contended in asking the court for a rehearing.

A rehearing has been asked also by the State on the contention that the court ruling was too restricted and did not give the State all the points it sought, though the rate sought by the State was upheld.

The Lone Star Gas Co. now charges 40 cents a thousand feet for gas delivered at city gates. Consumers pay that plus distribution charges in approximately 250 communities, mostly in North Texas.

More than 150 faults were alleged in the court rulings, in the company's application for a rehearing.

Among them were:

Elimination of $7,000,000 worth of property in computing a fair earning rate.

Elimination of $100,000 for advertising as an operating expenditure.

Adding $334,000 revenue on the theory that normally cold weather would increase the company income.

Rulings on the effect of extension of company lines into Oklahoma.

Contention was renewed that because courts are limited in their review of rate cases after they have been acted upon by the State Railroad Commission, there is denial of due process of law. A holding that the rate fixed by the State is prima facie correct was also argued to be unconstitutional.

The 32-cent rate was ordered by the State Railroad Commission after employing valuation engineers. Hearings extended over eight months at Fort Worth. The company appealed from the commission ruling to Fifty-third District Court. The trial resulted in a jury finding the 40-cent rate charged by the company was not unreasonable.

Seismographing for Oil

E. G. McKinney, associate member of the I.R.E., of the Oklahoma Gas & Electric Co., has just completed a book titled "Seismographing for Oil." This book of 38 pages presents in non-technical terms some of the methods used in prospecting for oil. The information which is presented is based on actual experience. The book is divided into four sections which include general explanation of seismographing, equipment and its uses, interpretation methods and miscellaneous subjects.

The interpretation of the data is clearly described by the use of charts and examples. "Seismographing for Oil" may be purchased from the publishers, Times-Journal Publishing Co., Oklahoma City, Okla.

WILDCAT OPERATIONS

OKLAHOMA WILDCATS

Week Ending July 27

NORTHERN OKLAHOMA

Alfalfa County

Tex-O-Kan Oil Co.'s No. 1 Acre, C SW NE Sec. 14-24-11w.
Oswego 5,810 ft.; at 6,255 ft. swbd. 70 bbls. oil in 24 hrs. 11/14/34; T.D. 6,460 ft.; fishing.

Beckham County

E. L. Martin et al's No. 1 Robertson, C NE SE Sec. 1-9-22w.
Spudded and S.D.

Star Oil Co.'s No. 1 Blair, C NW SE Sec. 25-9-26w.
Cellar and pits dug (2,200-ft. test).

Blaine County

Earl Ingraham et al's No. 1 Mastera, SW NW NW Sec. 27-16-11w.
S.D. 1,240 ft.

Caddo County

Denver Prod. & Ref. Co.'s No. 1 Sah-Can, C SE SE Sec. 33-10-10w.
Drlg. 8,030 ft.

H. W. Lee et al's No. 1 Stacey Ferrell, SW NE NE Sec. 3-6-13w.
Drlg. 2,350 ft. in blue shale.

F. A. Turner et al's No. 1 Spain, NE NE SW Sec. 1-5-11w.
Drlg. 2,344 ft. in red beds.

Cleveland County

Arab Pet. Co.'s No. 1 McKiddy, SE NW Sec. 16-7-1.
Drlg. 2,740 ft.

Hall-Briscoe, Inc.'s No. 1 Faut, SW SW NE Sec. 27-10-2w.
Drlg. 2,877 ft.

Coal County

Amerada Pet. Corp. and Stanolind Oil & Gas Co.'s No. 1 Traveler' Life, SW NW SE Sec. 28-1s-9e.
Sylvan 4,310 ft.; drlg. 4,370 ft.

Carter Oil Co. et al's No. 1 Thompson, C S½ NE NW Sec. 34-2-9.
Drlg. 4,195 ft.

Comanche County

Oscar Jones' No. 1-A Sheets, NE SW Sec. 26-2-10w.
Machine.

Garvin County

Charles Carter and W. B. Key, Inc.'s No. 1 Wood, C NW SW Sec. 5-4-3e.
S.D. 2,405 ft.

Grant County

Helmerich & Payne's No. 1 Crouse, C NE SW Sec. 29-25-3w.
Simpson dolomite 6,438 ft.; drlg. 6,443 ft.

Shell Pet. Corp.'s No. 1 Foster, NW SE Sec. 30-27-8w.
Moving in rotary.

Wentz Oil Corp. et al's No. 1 Wirtz (Community), SE SE NW Sec. 22-23-4w.
Drlg. 1,132 ft.

Yingling et al's No. 1 Allen, SW SE Sec. 34-26-4w.
Location.

Grear County

Morgan et al's No. 1 Carder, C SW SE Sec. 19-4-22w.
T.D. 3,226 ft.; fishing for drill pipe.

H. N. Payne et al's No. 1 Tressell, NW cor. Sec. 1-7-22w.
T.D. 1,785 ft.; U.R. 8-in. csg.; to deepen.
Cleaning out.

Harmon County

Masaad & Caudle's No. 1 Grosnoe, SE SW Sec. 14-3-25w.
Rigged up.

J. J. Mathis' No. 1 Keith, NE NW SW Sec. 12-5-26w.
Machine on ground.

Hughes County

Caprock Oil Co.'s No. 1 Parks, SW SW SE Sec. 34-7-8.
T.D. 225 ft.

Freeman et al's No. 1 Kite, NW NW NE Sec. 8-6-10.
Top sand 700 ft.; show oil; S.D.

Earl Sadler's No. 1 Scott, NW cor. Sec. 23-7-9.
Rig.

Texas Co.'s No. 1 Keaton, NW SW Sec. 4-8-10.
Wilcox 4,662-79 ft.; P.B. to 3,730 ft.; shot with 40 qts. at 3,740-50 ft.; T.D. 3,915 ft.

Kay County

J. T. Lindsay's No. 1 Waggoner, NW NW NE Sec. 2-27-1.
Drlg. 3,250 ft.

Marshall, Haddock et al's No. 1 Hermes, SW SW NW Sec. 6-26-4.
Drlg. 1,740 ft.

Kiowa County

Rajah Oil Co.'s No. 3 Stone, C SE NE Sec. 34-7-17w.
Gas 933-34 ft.; oil 944-52 ft.; tested 1 bbl. oil day; dry sand 1,098-1,103 ft.; T.D. 1,280 ft.; fishing for bit.

Leflore County

McCraw et al's No. 1 Tidwell, C NW SE Sec. 17-3-22.
T.D. 74 ft.; set 20-inch csg. & W.O.C.S.

Lincoln County

Chester L. Carlock's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Spudded and S.D.

Chas. Ralph's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Spudded and S.D.

Stanolind O. & G. Co. and Amerada Pet. Corp.'s No. 1 Connelly, SE NE SE Sec. 23-14-2.
Drlg. 4,355 ft.

Stanolind O. & G. Co. and Amerada Pet. Corp.'s No. 1 Cavanaugh, SE NE Sec. 21-15-5.
Dry and abd. 4,634½ ft.

Texas Co.'s No. 1 Niccum, SE SW NW Sec. 28-14-5.
Mayes 4,290 ft.; Sycamore 4,505 ft.; Hunton lime 4,598 ft.; cored slight show oil 4,629-44 ft.; show wtr.; P.B. with 50 sacks cement.

Logan County

Anderson-Kerr et al's No. 1 Goodium, NE cor. Sec. 15-15-2w.
Rigging up.

Olson Drlg. Co., Anderson-Prichard and Frank Buttram's No. 1 Cavalt, NW SW SE Sec. 22-16-3w.
R.U. rotary.

Sinclair Prairie and Slick-Urschel's No. 1 Koatsch, SW cor. Sec. 23-15-3w.
Second Wilcox 6,322 ft.; T.D. 6,341 ft.; cored 6,341-43 ft.; P.B. to 6,332½ ft.; bailed to bottom, no salt water, fresh water and oil in hole; P.B. to 6,204 ft. to test gas in Simpson; flowed 50 bbls. per day; shut in.

Stanolind O. & G. Co., Amerada Pet. Corp. and Eason O. & R. Co.'s No. 1 Gragg, SW SW NE Sec. 20-18-4w.
Drlg. 2,750 ft.

Texas Co. et al's No. 1 Wood, SW NE Sec. 34-15-4w.
Set pipe 505 ft.

Major County

Indian Territory Illuminating Oil Co. and Continental Oil Co.'s No. 1 Fairview, C E½ SW SE Sec. 32-22-14w.
Drlg. 6,170 ft.

Noble County

Atlantic Oil Prod. Co. et al's No. 1 Strom, 640 ft. S & W NE cor. SE¼ Sec. 8-20-1w.
Drlg. 1,510 ft.

Okfuskee County

Sunray Oil Co.'s No. 1 Culla, NE SW NE Sec. 13-12-8.
T.D. 745 ft.

Oklahoma County

Gypsy Oil Co. and Indian Territory Illuminating Oil Co.'s No. 1 Salisbury, NW NE NE Sec. 13-14-4w.
Viola 6,230 ft.; top second Wilcox 6,615 ft.; cored 6,620-25 ft.; no showing; cored 6,625-35 ft.; no showing.

Sinclair Prairie O. & G. Co.'s No. 1 Corbett, NE NW NE Sec. 17-13-3w.
Wilcox sand 6,645-6,706 ft., T.D.; flowed 435 bbls. of oil, 27% wtr., 2% b.s.

Osage County

J. A. Freeberg et al's No. 1, NE cor. SE Sec. 1-25-6.
Drlg. 529 ft.

Payne County

Amerada-Stanolind et al's No. 1 Friedman, SE cor. Sec. 28-19-3.
Simpson dolomite 4,289 ft.; sand 4,361-95 ft.; flowed oil into pits; S.D. for tankage.

Pawnee County

Stanolind O. & G. Co.'s No. 1 Shunatana, NE SW SE Sec. 32-22-3.
Oswego 3,485 ft.; fishing at 3,624 ft.; whipstock at 2,690 ft.; drlg. by at 2,725 ft.

Pontotoc County

E. M. Blanchard's No. 1 Crabtree, NE SE NE Sec. 27-3-6.
S.D. 2,920 ft.

Philip Boyle's No. 1 McCracken, NE NW NW Sec. 31-5-4.
Pumped salt water, 2,173 ft. T.D.; P.B. to 2,167 ft.

Charles E. Carter's No. 1 Wood, NW SW SE Sec. 5-4-3.
S.D. 2,495 ft.

Clark & Cowden's No. 1 Reynolds-Wagner, SE NW SE Sec. 17-2-7.
Location.

Continental Oil Co.'s No. 1 McCarty, C SW NW Sec. 12-1-7e.
Sands at 1,250-70 ft., 1,372-94 ft., 1,494-20 ft.; all showing oil saturation; drlg. 1,602 ft.

Crabb-Craw Oil Co.'s No. 1-A Breco, SE NE SW Sec. 3-4-6.
Sand 1,106-18 ft.; pumped 10 bbls. in 24 hrs.; S.D.

W. A. Delaney et al's No. 1 Fulsome, SE NE Sec. 35-4-6.
Location.

Fleetborn Oil Corp.'s No. 2 Oliver (twin), 330 ft. S and 1,040 ft. E of C Sec. 21-4-5.
Sand 1,090-1,140 ft. T.D.; H.F.W.; to P.B.

Franks Bros.' No. 1 Abbott, SW NW NE Sec. 34-3-6.
Rig.

Gillette & Kroeger's No. 1 Duver, NW NW SE Sec. 36-1n-6e.
T.D. 1,325 ft.; S.D.

McBride Inc. et al's No. 1 Copeland, SE NW Sec. 31-4-5.
Location.

Southern Oil Co.'s No. 1 Perry, SW SW NW Sec. 11-4-6.
Rig on ground.

Southern Oil Co.'s No. 1 Walker, NW NW SW Sec. 11-4-6.
H.F.W. 1,530 ft.; P.B. and shot with 20 qts. at 1,162-72 ft.; 200 ft. oil in hole; putting on pump.

Leonard Williams et al's No. 1 Breedon, NW cor. Sec. 6-2-5.
Spudded, rigging up standard tools.

Pottawatomie County

Paul Traugh et al No. 1 Lowry, near C NE SE NE Sec 30-6-5.
Broken sand 2,415-46 ft.; solid sand 2,446-61 ft.; T.D. 2,462 ft.; 1,300 ft. oil in hole; S.D. for tanks.

Pushmataha County

C. W. Whitehead et al's No. 1 Misser, SE SW SW Sec. 35-2s-18e.
Sand 3,360-65 ft.; drlg. 3,375 ft.

Seminole County

Carter Oil Co. and Shell Petroleum Corp.'s No. 1 Brown, C W½ SE SW Sec. 23-8-5.
Wilcox sand 4,405-20 ft., T.D.; dry; P.B. to 4,185 ft. to test Hunton.

L. Cooper's No. 1 Chandler, NE SE SW Sec. 4-5-6.
S.D. 1,780 ft.

Ray Dorris and J. T. Hall's No. 1 Dorris, SE SE SW Sec. 31-10-7.
Sand 520-60 ft.; H.F.W.; S.D. 608 ft.

Scott & Smith's No. 1 Abb, SE NW SE Sec. 4-6-6.
S.D. 2,134 ft.; R.U. standard tools.

Van Deventer et al's No. 1-A Benner, NE NE SW Sec. 3-8-8
Gilcrease sand 3,015-30 ft.; H.F.W.; fishing for csg.

Verser & Clay et al's No. 1 Thomas, NE SE NW Sec. 1-6-6.
T.D. 2,824 ft.; S.D.

Tom Phillips et al's No. 1 Abbott, NE cor. Sec. 33-8-7.
Wilcox 4,329-51 ft., dry; P.B. to 3,198 ft.; swbd. and flowed 225 bbls. in 4 days.

Washita County

Okla-Midwestern Oil Co.'s No. 1 Dock, SW cor. Sec. 21-8-18w.
Granite wash 2,604-16 ft., T.D.; running 6-in. csg.

L. P. McWhirter's No. 1 fee, SW cor. Sec. 24-8n-19w.
Drlg. 900 ft.

SOUTHERN OKLAHOMA

Atoka County

Keaton et al's No. 1-A Roland, NE cor. NW NE NE Sec. 16-3s-10e.
T.D. 850 ft. (corrected); lime at 800-47 ft.; will treat.

Mid-Continent Petr. Corp. et al's No. 1 Fulton, SW cor. Sec. 19-1s-12e.
Drlg. 900 ft.

R. H. Pierce et al's No. 1 Aetna Life Ins. Co., NW SW NE Sec. 10-1n-13e.
S.D. 935 ft.

Vierson et al's No. 1 Williams, NE SW NW Sec. 32-2s-10e.
Drlg. 1,384 ft.

Alfalfa County

Acre et al's No. 1 Acre, C SW NE Sec. 14-24-11w.
T.D. 6,460 ft.; cleaning out.

Bryan County

Welch Oil Corp.'s No. 1 Collins, NE NE Sec. 19-8s-8e.
Sand 730 ft.

J. D. Parks' No. 1 Coats, SE NE SW Sec. 1-5s-8e.
T.D. 325 ft.; S.D.

H. B. Smith et al's No. 1 Henry, C NW NE Sec. 10-8s-7e.
Rig (4,500 ft. test).

Trio Oil Co.'s No. 1 Gilbert, SW NE SW Sec. 25-8s-7.
Sand 885-95 ft.; show oil; U.R. 8-in. csg.; T.D. 986 ft.

Carter County

Bland et al's No. 1 Center, NE cor. Sec. 6-4s-2e.
Drlg. 1,720 ft.

Waco Turner's No. 1 Munson, NE NW NE Sec. 35-5s-2w.
S.D. 4,605 ft.

Carter Oil Co.'s No. 1 Carter-Williams, SW NE SW Sec. 27-2s-3w (7,000-ft. test).
Drlg. lime 6,620 ft.

Choctaw County

E. B. Abernathy's No. 1 Christian, 400 ft. N and 1,245 ft. W of SE cor. Sec. 1-6s-19e.
Arbuckle lime 494-527 ft.; S.D. 548 ft.; set 8-in. csg. 522 ft.

Rhodes et al's No. 1 Possumik Savings Bank, SE cor. Sec. 1-5s-17.
Spudding.

Jackson County

Associated Oil Co.'s No. 1 Harrell, NE NE SE Sec. 13-1s-21w.
S.D. 875 ft.; red beds.

Dengall Oil & Gas Co.'s No. 1 Robinson, SE SE NE Sec. 32-1s-22w.
Drlg. 1,935 ft.

Gypsy Oil Co.'s No. 1 Boucher, NW SW SW Sec. 32-1-19w.
T.D. 2,340 ft., in lime.

Gypsy Oil Co.'s No. 1 Stokes, SE NW SW Sec. 11-1-20w.
Lime 1,709-11 ft.; T.D. 1,722 ft.; S.D.

Marshall & Burnham's No. 1 Hess, NE SW NE Sec. 27-1s-20w.
T.D. (corrected) 1,160 ft.; S.D.

Palo Duro Oil Co.'s No. 1 Ealum, SW SW SE Sec. 16-2-21w.
Granite wash 1,838-50 ft. water, drlg. 2,255 ft.

Triangle Oil Co.'s No. 1 Fox, E½ W½ NW Sec. 11-3n-20w.
Granite wash 608-13 ft.; 400 ft. wtr.; drlg. 625 ft.

Whatley & Whatley's No. 1 Holt, NW SW SE Sec. 20-1n-20w
Dry and abd. 1,560 ft.

Jefferson County

Gypsy Oil Co.'s No. 1 James, SW SE SE Sec. 30-4s-6w.
S.D. 2,102 ft.

G. W. Hewell et al's No. 1 Currey, SE SW Sec. 36-4s-9w.
T.D. 40 ft.; pipe cmtd.

Johnston County

W. A. Delaney et al's No. 1 Diamond, NW NE SE Sec. 5-1s-8.
Drlg. 2,100 ft.

M. A. Neff and R. A. Godfrey's No. 1 Ford, NE SE NW Sec. 13-4s-5.
Drlg. 87 ft.

Schermerhorn Oil Co.'s No. 1 Rich, SW SE SE Sec. 35-4s-4e.
T.D. 890 ft.

Love County

Sinclair Prairie Oil Co.'s No. 1 Stockton, SE SE SW Sec. 26-6s-2w (5,000 ft. test).
T.D. 427 ft.; pipe cmtd.

Marshall County

Jess Cook et al's No. 1 May, NE NW Sec. 12-8s-5.
Drlg. 75 ft.

Norman Smith's No. 1 Chestnut, NE cor. Sec. 23-8s-5e.
Drlg. 87 ft.

Paul Robb's No. 1 Vittetoe, C NE SE Sec. 11-5s-4e.
Top Sylvan shale 5,405 ft.; T.D. 5,461 ft.; S.D.

Murray County

Equitable O. & G. Co.'s No. 1 Ferguson, NE NE SW Sec. 36-1s-2.
Oil Creek sand 1,910-2,092 ft.; flowed fresh wtr.; drlg. 2,092 ft.

Stephens County

Geo. Pace et al's No. 1-A Damron, SE SE SW Sec. 25-2s-6w.
Location.

Prince Bros.' No. 1-A Williams, C SW SE Sec. 19-2-8w.
Rig.

Tillman County

J. B. Connelly's No. 1 McCord, NW SE NE Sec. 15-1-17w.
Drlg. 155 ft.

Rock Island Ref. Co.'s No. 1 Lynch, C SE SW Sec. 35-1s-16w.
Dry and abd. 1,380 ft.

Loper et al's No. 1 Conrad, NE cor. Sec. 35-1s-19w.
Drlg. in brown shale 1,660 ft.

KANSAS WILDCATS

Week Ending July 27

(Descriptions are East unless marked otherwise)

Barber County

Southern Drlg. Co. et al's No. 1 Davis, 330 ft. from W and 330 ft. from S lines of NE Sec. 13-34-15w.
Viola 5,215 ft.; at 5,275 ft., 1,000,000-ft. gas show and spray of oil; will acidize.

L. H. Wentz' No. 1 Skinner, SE NW NW NE Sec. 29-21-14w.
Drlg. 3,962 ft.

Barton County

Lario O. & G. Co. et al's No. 1 Peter, NW cor. Sec. 24-20-11w.
Moving in material.
Palmer Oil Corp.'s No. 1 Morris, SE NW NE Sec. 6-19-15w.
Drlg. 1,415 ft.
C. L. Price et al's No. 1 Ehrlich, NW SE Sec. 10-16-13w.
U.R. 8-in. csg. at 2,335 ft.
Suppes & Witt's No. 1 Hayes, NW cor. Sec. 7-16-15w.
Drlg. 2,500 ft.
Torrey & Feaster's No. 1 Feist, NE NE SE Sec. 29-18-11w.
Drlg. 1,625 ft.

Butler County

Polhamus et al's No. 2 Semisch, C S½ NE NE Sec. 5-28-7.
Drlg. 2,515 ft.
Sanford et al's No. 1 Cron, SE SE SE Sec. 1-28-4.
Dry and abd. 2,281 ft.
Western Kansas O. & R. Co.'s No. 1 King & Marshall, NW NW SW Sec. 11-28-6.
Drlg. 2,010 ft.

Clay County

Seidel Bros.' No. 1 Younken, C S½ SE NW Sec. 21-9-4.
Mississippi 1,772-81 ft.; est. 25 bbls. oil and some wtr.; P.B. to 1,773 ft.; hole full water; abd.

Cowley County

Baden, Johnson, Roth & Faurot's No. 1 David, NE SW Sec. 35-30-4.
Drlg. 2,150 ft.
Lloyd, Frost & Study's No. 1 Weathered, SW SE SE Sec. 28-31-3.
Siliceous lime 3,339 ft.; pumped 92 bbls. of oil and 47 bbls. of wtr. in 17 hrs.; H.F.W. 3,405 ft.; P.B. 3,349 ft.; no test.
Murfin & Stewart's No. 1 Newton, SE SE SE Sec. 21-30-2.
Building rig.
Wakefield's No. 1 Tharp, SE SE NE Sec. 10-32-3.
Drlg. 3,320 ft.

Dickinson County

Dutch Oil Co.'s No. 1 Phillips, C NE NW Sec. 15-15-1e.
Hunton 2,808 ft.; H.F.W. 2,812 ft.; S.D. 2,880 ft.

Ellis County

Joe Aylward's No. 1 Dreiling, SE SE SE Sec. 3-14-16w.
S.D. 3,490 ft.
Ellis County Oil Co.'s No. 1 Freis, near C SE SE NW Sec. 10-12-20w.
Moving in material.
Helmerich & Payne et al's No. 1 Kuhn, C NE quarter Sec. 16-14-20w.
Oswald 3,515 ft.; cored saturated lime 2,542-53 ft.; rigging up standard tools.
Tom Palmer and Storm King Oil Co.'s No. 1 Ruder, SE SE NW Sec. 17-15-18w.
Show oil 3,444-46 ft.; T.D. 3,350 ft.
L. Roark et al's No. 1 Bemis, SE SE SE Sec. 16-11-17w.
Drlg. 340 ft.
Stanolind O. & G. Co.'s No. 1 Penney-Wann, NW SW SE Sec. 12-15-20w.
Cored 3,616-43 ft.; reaming.

Ellsworth County

Franco Central et al's No. 1 Frevert, SW cor. Sec. 8-17-10w.
Rigging up.
Lario O. & G. Co.'s No. 1 State, SW SW SW Sec. 29-15s-8w.
T.D. 3,937 ft.; P.B. 2,525 ft. & C.O.

Graham County

Helmerich & Payne et al's No. 1 Stites, C SW SW Sec. 8-10-22w.
Cmtd. pipe 3,864 ft.
Vickers Pet. Co. & Phillips Pet. Co.'s No. 1 Hutton, 430 ft. W and 330 ft. S of NE SE Sec. 29-8-22w.
Moving in materials.

Harper County

Kessler, Thier et al's No. 1 Wolfje, SW SW SE Sec. 17-33-6w.
Drlg. 4,425 ft.

Harvey County

Goering Bros.' No. 1 Brainard, NE SW Sec. 3-23-2w.
Set 12-in. csg. at 1,320 ft.; C.O.
H. H. & S. Oil Co.'s No. 1 Frizzle, NE NE SE Sec. 31-23-2w.
Drlg. 3,060 ft.
Hartman & Blair et al's No. 1 Redinger, NW cor. Sec. 15-24-3w.
Fishing 3,045 ft.
Winkler Koch et al's No. 1 Mueller, SE SW NW Sec. 15-23-2w.
Hole full water 3,340 ft.; S.D. 3,360 ft.

Kingman County

Derby et al's No. 1 Bartholomew, SW NW NW Sec. 5-27-4w.
Set 6-in. csg. 4,016 ft.; cored to 4,027 ft.
Kingman Oil Co.'s No. 1 Wetherall, NE NE SW Sec. 20-28-10w.
Siliceous lime 4,586-4,612 ft.; water; abd.

McPherson County

Carey & Miller's No. 1 Husband, SE SE NW Sec. 6-19-3w.
Drlg. 1,365 ft.
Hollow, Toews & Hinkle's No. 1 Aschman, NW NW SE Sec. 8-21-4w.
Drlg. 2,350 ft.
Shell Pet. Corp.'s No. 1 Wenger, NE cor. Sec. 2-20-1w.
Viola 3,356-64 ft.; T.D.; swbd. 255 bbls. in 10 hrs.; 50% wtr.; acidized; potential production 100 bbls. oil, 620 bbls. of wtr.; P.B. to 3,359 ft.; pumped 80 bbls. of oil and 210 bbls. of wtr. in 7 hrs.; may deepen.

Osage County

Jim Edwards' No. 1 Detrick, C NW SE Sec. 21-14-15.
Show oil and gas 783-800 ft.; T.D. 800 ft.; shut down.

Reno County

Allison & Fitzwilliams' No. 1 Dukelow, NE NE NE Sec. 11-22-6w.
Drlg. 1,884 ft.
Anderson & Kerr et al No. 1 Davies, NE cor. Sec. 28-23-7w.
Drlg. 3,366 ft.
Haynes Bros.' No. 1 Mueller, SE SE NW Sec. 30-24-4w.
At 3,427 ft. swabbed 65 bbls. oil, 20 bbls. water in 19 hrs.; drlg. 3,522 ft.
Shell Pet. Corp.'s No. 1 Reese, center W½ W½ SW¼ Sec. 11-26-9w.
Rigging up rotary.
Stanolind & Amerada's No. 1 J. J. Hilger A, NE NE SW Sec. 21-46-4w.
Spudding.

Rice County

Aylward et al's No. 1 Rickard, SW NW Sec. 22-18-9w.
Rig.
Detrick et al's No. 1 Conner, C NE NE Sec. 28-19-7w.
Rigging up.
Detrick et al's No. 1 Monroe, C NE NE Sec. 9-20-7w.
Spudded & S.D.
Three Rivers Oil Co.'s No. 1 Buehler, NW NW NW Sec. 17-18-8w.
Drlg. 2,205 ft.

Rooks County

El Dorado Refining Co.'s No. 1 Marshall, C SE SE Sec. 8-7-17w.
Rig.
Murfin et al's No. 1 Washusin, NE NE SE Sec. 19-9-16w.
Rig.
Lario O. & G. Co. et al's No. 1 Fisher, NE cor. Sec. 22-10-18w.
Rig.
Smith & Ash's No. 1 Nelson, NW NW NE Sec. 27-10-16w.
Drlg. 2,910 ft.
Trees Oil Co. and Findeiss' No. 1 Johnson, SW SW SE Sec. 26-10-19w.
H.F.W. at 2,507 ft.; S.D. 2,508 ft.

Rush County

Boyle & Grossman's No. 1 Wilson, NE NE NE Sec. 33-17-19w.
Hole full water; T.D. 3,759 ft.; abd.
Boyle & Grosman et al's No. 1 Yost, C SW SW Sec. 28-17-18w.
Granite Wash 3,700 ft.; H.F.W. 3,719-22 ft.; drlg. 3,745 ft.
Gypsy Oil Co.'s No. 1 Kraisinger, SE NE SE Sec. 23-18-17w.
Drlg. 1,069 ft.
Lario O. & G. Co. et al's No. 1 Gillig, NE SE NW Sec. 24-17-17w.
Show gas 3,015 ft.; straightreaming to 3,110 ft.
Ramsey Pet. Co. et al's No. 1 Darkes, SW SW NW Sec. 5-17-20w.
R.U., cable tools at 3,520 ft.
Twin Drlg. Co. et al's No. 1 Appl, SW SW NE Sec. 29-17-17w.
S.D. at 2,505 ft.

Russell County

J. Brouk and R. D. Bailey's No. 1 Kleusner, NW SE Sec. 34-15-12w.
Drlg. 2,440 ft.
Buffalo Oil Co.'s No. 1 Kunz, NE NE SW Sec. 19-14-15w.
Cellar and material.
Coraleana Oil Co.'s No. 1 Flegler, SE SE SE Sec. 11-15-14w.
Drlg. 1,280 ft.
Finney et al's No. 1 Chenowath, SW SW SW Sec. 10-15-13w.
Cellar.
Hartman & Blair's No. 1 Claussen, SE NE SW Sec. 34-12-14w.
Cellar.
Hartman & Blair's No. 1 Mills, SE SE SW Sec. 27-13-15w.
Rigging up.
Murfin et al's No. 1 Gorham estate, NE NE SE Sec. 29-14-15w.
Cellar.
Nassau Oil Corp.'s No. 1 Karst, NW SW NE Sec. 27-15-14w.
Drlg. 540 ft.
Pryor and Lockhart's No. 1 Spicer, NE SE Sec. 21-11-15w.
S.D. 2,700 ft.
P. G. Reynolds' No. 1 Fredrickson, SE SW SE Sec. 6-13-12w.
Cellar.
Roth & Faurot's No. 1 Shaffer, NW NW NE Sec. 31-13-12w.
Cleaning out at 763 ft.
Stearns & Streeter's No. 1 Dreiling, SW SW SW Sec. 8-13-15w.
Drlg. 633 ft.
Vernon & Murphin's No. 1 Becker, NE cor. Sec. 32-15-14w.
U.R. 8-in. csg. to 2,531 ft.
A. E. Seely et al's No. 1 Herman, SE NW Sec. 27-12-15w.
Top Oswald 3,030 ft.; drlg. 3,220 ft.

Sedgwick County

Allison & Fitzwilliams et al's No. 1 Struthers, NE SW Sec. 34-28-2w.
Drlg. 3,645 ft.
Dickey Oil Co. et al's No. 1 Chase, SE cor. Section.
Drlg. 1,235 ft.

Stafford County

C. B. Davis et al's No. 1 Riley, SE cor. Sec. 19-22-11w.
Siliceous lime 3,589-3,606 ft.; T.D. 5,630 ft.; pumped 135 bbls. oil & 17 bbls. wtr.; P.B. 3,603 ft.
Empire O. & R. Co.'s No. 1 Grove, NE NE NW Sec. 5-22-11w.
U.R. 8-in. csg. 2,945 ft.
Rose-Spring Drlg. Co.'s No. 1 Toland, NW NW SW Sec 2-25-14w.
Rig.

Sumner County

Allison & Fitzwilliams et al's No. 1-B Hitchcock, SE NW Sec. 16-30-1w.
Drlg. 3,109 ft.
D. J. Wilson et al's No. 1 Clark, 1,320 ft. from W and 25 ft. from S line of NW Sec. 15-35-1w.
Drlg. 1,170 ft.
Winkler & Koch et al's No. 1 Belsley, SW SW NW Sec. 2-32-2w.
Drlg. 1,060 ft.

Trego County

Central Commercial's No. 1 Wagg, NW NW SE Sec. 17-13-21w.
Fishing at 1,600 ft.
Hansa & Lauck and Olson Drlg. Co.'s No. 1 Lang, SE SE NW Sec. 1-14-21w.
350 ft. water in hole at 3,569-74 ft.; set 6-in. csg. 3,579 ft.
Vickers et al's No. 1 Secor, NW NW NW Sec. 25-15-24w.
Drlg. 1,100 ft.

Woodson County

Connell & Marshall's No. 1 Klick, SW NW SW Sec. 20-25-14.
Sand 1,390-1,403 ft.; T.D.1,437 ft.; shot with 120 qts.; no test.

GULF COAST WILDCATS

Week Ending July 27

Raccoon Bend—Austin County

Humble O. & R. Co.'s No. 11-X Sherrod, 933 ft. eastward from 10-X, 250 ft. at R/A southwestward from NE line, Wm. C. White Sur.
T.D. 4,110 ft.; top sand 3,966 ft.; 7-in. csg. 3,957 ft.; I.P. 45 bbls. per hour, ½-in. choke; 210 lbs. T.P., 525 lbs. C.P.
Humble O. & R. Co.'s No. 6-X Wilson, 2,621 ft. along SW line from SW½, 150 ft. NE of SW line, Wm. Harvey Sur. Coring shale 4,108 ft.
Humble O. & R. Co.'s No. 6 McCasland, 933 ft. SE from No. 4-X McCasland, 250 ft. at R/A NE from SW line, Wm. C. White Sur.
T.D. 4,082 ft.; 7-inch csg. 3,941 ft.

Allen Dome—Brazoria County

Mills Bennett Prod. Co.'s No. 4 Rose Allen, 320 ft. SE of No. 1, 300 ft. E of No. 4 Owens, J. G. Mendal Sur.
T.D. 5,674 ft.; heaving shale; cemented back 4,464 ft.; drilled to 4,670 ft., tested salt wtr., abd.

Damon Mound—Brazoria County

Intercoastal Oil Co.'s No. 12 Wisdom, 150 ft. from NW line and 10 ft. from SW line of Lot "D," Blk. No. 51.
S.D. 2,600 ft.

Danbury—Brazoria County

Turnbull & Irwin's No. 1 Blakely, Sec. 14, H.T.&B. Sur.
Drlg. shale and lime 3,700 ft.

Hastings—Brazoria County

Humble O. & R. Co.'s No. 1 E. Lively, 330 ft. from the N line, and in the center of E and W lines of Lot 13, A.C.H.&B. Sur.
T.D. 6,099 ft.; top sand at 6,078 ft.; 7-in. csg. 6,068 ft.
Humble O. & R. Co.'s No. 1 J. F. Bridges, center of N 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.
Location.
Humble O. & R. Co.'s No. 2 J. F. Bridges, center of S 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.
Location.
Humble O. & R. Co.'s No. 1 J. C. Johnson, center of 10-ac. lease, A.C.H.&B. Sur. No. 2.
Location.
Stanolind Oil & Gas Co.'s No. 1-A, W. H. Avitts, 330 ft. S, 330 ft. W of NE cor. of 45.85-ac. "A" lease, A.C.H.&B. Sur. No. 1.
Rigging up.
Stanolind Oil & Gas Co.'s No. 2 Williams, 330 ft. S, 330 ft. E of the most NW cor. of the Williams 81.13-ac. tract A.C.H. &B. Sur. No. 1.
T.D. 110 ft.; 16-in. csg. at 105 ft.
Stanolind Oil & Gas Co.'s No. 1 Frank Guido, 330 ft. N, 990 ft. W of SE cor. of Guido 40-ac. tract, H.T.&B. Sur. No. 36.
Running 10¾-in. csg. at 2,020 ft.
Stanolind Oil & Gas Co.'s No. 1 Fannie Drake, 330 ft. N, 990 ft. W of SW corner of 120-ac. tract, H.T.&B. Sur. No. 36.
Set 10-in. csg. at 2,070 ft.; W.O.C.
Stanolind Oil & Gas Co.'s No. 1 Pennock Estate, 330 ft. N, 990 ft. W of SE cor. of 40-ac. tract, H.T.&B. Sur. No. 36.
Drlg. plugs at 2,375 ft.
Stanolind Oil & Gas Co.'s No. 1 Laur D. Shaw, 330 ft. S, 330 ft. W of most easterly NE cor. of 120-ac. tract, H.T.&B. Sur. No. 36.
Drlg. shale at 3,015 ft.
Stanolind O. & G. Co.'s No. 3 J. W. Surface, 330 ft. S and 455 ft. W of most northerly NE cor. of 75.9-ac. tract, A.C. H.&B. Sur. No. 2.
T.D. 6,100 ft.; 7-in. csg. 5,939 ft.
Stanolind O. & G. Co.'s No. 3 B. L. Turner, 330 ft. at R/A from NW line and 330 ft. from S line of Turner 195-ac. tract, A.C.H.&B. Sur. No. 1.
Drlg. shale 4,626 ft.
Stanolind O. & G. Co.'s No. 4 Sneed, 330 ft. S, 330 ft. W of NE cor. of Lot 12, D. M. Jay Subd., on Sneed 225-ac. tract, A.C. H.&B. Sur. No. 2.
Coring sand 6,382 ft.
Stanolind O. & G. Co.'s No. 2 E. Grote, 466 ft. at R/A from N line and 1,061.6 ft. at R/A from E line of Grote 71.62-ac. tract, A.C.H.&B. Sur. No. 2.
Drlg. hard sand 5,749 ft.
Stanolind O. & G. Co.'s No. 2 Turner, 285 ft. N, 2,576 ft. W of SE cor. of 195-ac. tract, A.C.H.&B. Sur. No. 1.
Running screen and liner 6,100 ft.

Manvel—Brazoria County

Bowles and Barsodi's No. 5 B. E. Norvell Investment Co., 274.5 ft. from S line, 440 ft. from E line of Lot 45, Sec. 23, H.T. &B. Sur.
Location.
Jay Simmons' No. 1 Wilson, center of Lot 25, H.T.&B. Sur. No. 23.
Location.
Jay Simmons' No. 1 Stitt, cor. of E line, Lot 23.
Drlg. salt wtr. and oil sand 4,117 ft.
J. Simmons et al's No. 1 Martens, 31 ft. WE line center of North and South lines, Lot 19.
S.D. shale 1,110 ft.
J. W. Serrells' No. 1 Swift, Blk. 21, Abst. 318, H. N. Little Sur.
Derrick.
Texas Co.'s No. 6 Houston Oil Field Asso., 247.5 ft. S, 400 ft. W of NE cor. of Lot 25, A.C.H.&B. Sur., Sec. 91.
Rigging up.
Texas Co.'s No. 12-A Belcher, 770 ft. S, 41 deg. 40 ft. W and 648 ft. S, 47 deg. 59 ft. E from N cor. of lease, H. N. Little Sur.
Drlg. shale 3,802 ft.
Texas Co.'s No. 3 Boff, 50 ft. W, 50 ft. S of NE cor. of Lot No. 24, Charles O'Donnell Sur.
Drlg. oil sand 5,150 ft.
Texas Co.'s No. 1 O. W. Halligan, center of Lot 27, H.T.&B. Sur. No. 23.
Drlg. shale and lime 3,160 ft.
Texas Co.'s No. 2 O. W. Halligan, center of Lot 26, H.T.&B. Sur. No. 23.
T.D. 4,030 ft.; redrilled to make D.S. test.
Texas Co.'s No. 16 Houston Oil Fields Assn., 247 ft. S, 440 ft. E from NW cor. of Lot 19, A.C.H.&B. Sur. No. 91.
Drlg. lime 4,242 ft.
Texas Co.'s No. 2 Dawson, 247 ft. S, 241 ft. W of NE cor. of Lot 58, H.T.&B. Sur. No. 23.
Location.
Trumba Oil Co.'s (J. M. Campbell) No. 1 H. McCauley, 150 ft. each way out of NE cor. of W 5 acres of Lot No. 2, A.C.H.&B. Sur. No. 91.
Location.
Turman Oil Co.'s No. 2 Hart, 40 ft. N, 50 ft. W of No. 1.
T.D. 4,020 ft.; tested salt wtr.; set screen.
Turman Oil Co.'s No. 3 Hart, 150 ft. E of W line, 423 ft. S of N line of Lot 3.
Location.
Uscan Oil Co.'s No. 1 Ebbert, 247.5 ft. from N line, 247.5 ft. from S line of 10-ac. tract, Sec. 23, H.T.&B. Sur.
T.D. 4,085 ft.; resetting screen.
Whittle Oil Co.'s No. 1 Duke, 320 ft. W of E line, center N and S Lot 16, H.T.&B. Sur. No. 23.
T.D. 4,010 ft.; set screen; swabbing.
Woodbine Oil Co.'s No. 1 A. F. Bedde, midway N and S lines of a 2-ac. lease, Blk. 29, H.T.&B. Sur.
Abd. location.

Old Ocean—Brazoria County

Harrison & Abercrombie's No. 2 Bernard River, 1,000 ft. N, 54 deg. W, 400 ft. S. 36 deg. W of No. 1, Charles Breen Sur
T.D. 3,661 ft.; top sand 3,646 ft.; fishing for stuck drill stem.

Port Lavaca—Calhoun County

Halliburton Oil Prod. Co.'s No. 3 Burton 801 ft. E of No. 1 M. Sanches.
Coring gas sand at 6,207 ft.
Steinberger Pet. Co.'s No. 2 Shofner, 932 ft. SW of No. 1 Shofner, and 466 ft. from SE line of tract, M. Sanches Sur.
T.D. 6,244 ft.; 7-in. 6,216 ft.; rerunning screen.
Texas Co.'s No. 1 Shofner, SE offset to Steinberger's No. 1 Shofner, M. Sanches Sur.
T.D. 6 260 ft.; 7-in. csg. 6,232 ft.; P.B. and sidetracked at 5,511 ft.; drlg. sandy shale at 6,228 ft.
Tulane Gordon's No. 1 W. A. Shofner, 339.5 ft. from N line, 295 ft. from E line of block, D. Tilley Addn., M. Sanches Sur. Location.

Anahuac—Chambers County

Humble Oil Co.'s No. 1-B Meddleton, 466 ft. out of SE cor. of Sec. 56, H.&T.C. Sur.
Location.
Humble Oil & Refg. Co.'s No. 5 Meddleton, 464 ft. W of E line, 1,339 ft. S of N line of Sec. 58, H.&T.C. Sur.
Location.
Humble Oil & Refg. Co.'s No. 4 Meddleton, 2,085 ft. N of S line, 466 ft. E of W line of Sec. 58, H.&T.C. Survey.
Drlg. shale at 4,779 ft.
Humble O. & R. Co. and Rycade Oil Co.'s No. 1 Engels, 466 ft. out of SE cor. of Sec. 50, H.&T.C. Sur.
16-in. csg. at 106 ft.; drlg. shale 112 ft.
Humble O. & R. Co.'s No. 2 Broussard 2,332 ft. E of W line, 2,332 ft. N of S line of Sec. 63, H.&T.C. Sur.
Location.
Humble O. & R. Co.'s No. 3 Broussard, 1,399 ft. out of NW cor. of Sec. 63, H.&T.C. Sur
T.D. 7,100 ft.; 2½-in. tubing at 6,869 ft.; initial production 24 bbls. per hour on ¾-in. tubing; 809 lbs. T.P.; 1,025 lbs. C.P.

Mason & McCarthy's No. 2 White, 932 ft. W of No. 1, 466 ft. N of S line of James McGahey Sur.
Building derrick.

Sun Oil Co.'s No. 1 White, 466 ft. out of NE cor., 466 ft. W of E line, 2,288 ft. S of N line of James McGahey Sur.
Building derrick.

Barbers Hill—Chambers County

Sun Oil Co.'s No. 7 Higgins, 50 ft. S of N line, 50 ft. W of E line.
Drlg. shale 4,212 ft.

Sun Oil Co.'s No. 11 Chambers County, half way between and in line with Nos. 9 and 10.
Drlg. shale 5,050 ft.

Texas Gulf Prod. Co.'s No. 25-B Kirby, 75 ft. S of N line of Kirby "B" Lease, S offset to No. 3 Fitzgerald.
Drlg. lime at 4,062 ft.

Yount Lee Oil Co.'s No. 30 Chambers County School Land, 50 ft. N of S line, direct offset to Sun Oil Co.'s No. 11
Drlg. sand and shale 3,605 ft.; 5 9/10-in. csg. at 3,600 ft.

Big Creek—Fort Bend

Trans State Oil Co.'s No. 1 B. J. Wheat, 108 ft. N of S cor. of J. F. Ahlers lease and 88 ft. E at right angles, W. Young Sur.
Top sand 3,422 ft.; coring sand 3,428 ft.

Blue Ridge—Fort Bend County

Mills-Bennett Prod. Co.'s No. 3 L. W. Lusher, Thomas Habermacher Sur.
Coring sandy shale 4,211 ft.

Boling—Fort Bend County

S. A. Brewster's No. 2 H. R. Farmer, James Scott Sur.
Rig up.

Sun Oil Co.'s No. 1 H. R. Farmer, 103 ft. from N line, 359.2 ft. from W line of 100-ac. tract, James Scott League Sur.
T.D. 4,089 ft.; swabbed salt water, little oil and gas show.

Texas Co.'s No. 13 Anne Taylor, 150 ft. N at R/A of 10-ac. tract, S. F. Austin League.
Location.

Orchard—Fort Bend County

Gulf Prod. Co.'s No. 44 Moore, 500 ft. NW of No. 42, Leo Burknapp Sur.
S.D. 611 ft.

Gulf Prod. Co.'s No. 43 Moore, 350 ft. E along S line of SW cor. of E.M.&G. Co. Sur. and 740 ft. N at R/A to said line of lease, 350 ft. E of No. 3 Moore.
6,652 ft.; 7-in. csg. 6,584 ft.; well under control.

Thompson—Fort Bend County

Gulf Prod. Co.'s No. 9 Hammerstram, S Kennedy Sur.; 330 ft. N of S line, 4,775 ft. E of W Line.
5,390 ft. 7-in. csg. 5,274 ft., initial production 11 bbls. per hour through ⅝-in. choke.

Humble O. & R. Co.'s No. 3-B Gubbels, 986 ft. N of No. 1, 466 ft. W of E line, S. Kennedy Sur.
10¾-in. csg. 575 ft.; drlg. shale 3,561 ft.

Humble O. & R. Co.'s No. 2 Gubbels, 50 ft. E of W line, 500 ft. N of S line, 634 ft. W of No. 4-B Gubbels, S. Kennedy Sur.
Top sand 5,273 ft.; T.D. 5,374 ft.; rigged up to pump.

High Island—Galveston County

Yount-Lee Oil Co.'s No. 48 Cade, 900 ft. SE and 150 ft. NE of SW corner Block 4, Fitzsimmons Survey.
Drlg. shale 720 ft.

Yount Lee Oil Co.'s No. 3 Maco-Stewart, 202 ft. S of No. 2 Stewart and 132 ft. W of E line of 7.73 acre tract, D Dunman Survey.
Spudded.

Yount Lee Oil Co.'s No. 1-C Geo. Smith, D. Dunman Sur.
Drlg. shale 4,710 ft.

Yount Lee Oil Co.'s No. 47 Cade, Fitzsimmons Sur.
Drlg. sand, shale and lime 5,288 ft.
No report.

Yount Lee Oil Co.'s No. 2 Louisafet, 150 ft. due S of No. 1, M. Dunman Sur.
T.D. 4,598 ft.; 7-in. csg. at 4,309 ft.

Yount Lee Oil Co.'s No. 2-A Taylor, 85 ft. W of No. 1, A. Dunman Sur.
Drlg. shale 5,731 ft., no report.

Yount Lee Oil Co.'s No. 46 Cade, 424 ft. SW of No. 35, 424 ft. NW of No. 36, Fitzsimmons Sur.
T.D. 5,339 ft.; tested salt water at 5,497 ft.

Dickinson—Galveston County

Humble Oil & Refg. Co.'s No. 1 Hanson, 502 ft. from N line and 254 ft. from E line of 15.59 acre tract.
T.D. 8,045 ft.; top sand 8,020 ft.; set 7-in. csg. 8,022 ft.; making gas with distillate.

Humble Oil & Refg. Co.'s No. 6 Maco Stewart, 5,937 ft. S of NE corner, 1,390 ft. W of E line and 1,390 ft. E of W line and 466 ft. N of S line of Stewart 563 acre lease, J. Sellers Survey.
Drlg. sand 7,021 ft.

Humble O. & R. Co.'s No. 5-A Stewart, 466 ft. W of E line of Stewart "A" Lease, 5,500 ft. due S of No. 2-A Stewart, John Sellers Sur.
Rig up.

Humble O. & R. Co.'s No. 1 Bayou Development Co., 375 ft. S of N line and midway between E and W lines of Lot No. 7, John Sellers Sur.
Drlg. sand 5,790 ft.

Humble O. & R. Co.'s No. 1 E. E. Anderson, 375 ft. N of S line, and midway between E and W lines of Lot No. 4, John Sellers Sur.
Location.

Humble O. & R. Co.'s No. 2-A Maco Stewart, 3,224 ft. S along E line of S bank of Bayou and 566 ft. W of E line at R/A John Sellers Sur.
T.D. 9,181 ft.; D.S. test at 9,125-81 ft., 93 thribbles salt wtr., 6 thribbles mud; P.B. to 9,100 ft. and perforated csg.; 9,036-92 ft. tested 52 bbls. distillate 12 hours, ¼-in. choke, 3,100 lbs. T.P. and C.P.; P.B. to 8,770 ft., running tubing.

Pure Oil Co.'s No. 2 J. W. Shelar, 779 ft. N. 182 ft. W of N. I. Shelar, B.B.B. &C. Sur.
Preparing to drill plug at 1,676 ft.

Stanolind O. & G. Co.'s No. 1 State, 247 varas S of Humble O. & R. Co.'s No. 1 Jones.
Drlg. lime 5,563 ft.

Arriola—Hardin County

Houston Oil Co.'s No. 7-X fee, 660 ft. 20 deg. 30 ft. SE from No. 1-X.
Drlg. shale 2,913 ft.

Houston Oil Co.'s No. 8 fee, Arriola Sur.
T.D. 3,062 ft.; coring sand 2,950 ft.

Republic Prod. Co.'s No. 12 fee, 2,599 ft. S of N line, 474 ft. E of W line of E. Arriola Sur.
T.D. 3,728 ft.; pulling liner and screen.

Batson—Hardin County

John Deering's No. 1 Conzelman, 2,810 ft. E along N line from NW cor. of H. Numm Sur. and 35 ft. at R/A, W. Donaho Sur.
T.D. 5,590 ft., slight show of oil and gas.

John Deering's No. 1 Bullock, 1,000 ft. N, 17 ft. E of middle line of 30-ac. tract, Bullock tract, Dondo Sur.
T.D. 6,294 ft.; hole heaved to 4,944 ft.; S.D.

John Deering's No. 2 Cruse, 200 ft. E and 50 ft. S of No. 1 Cruse, W. Donaho Sur.
Drlg. shale 2,495 ft.

Shell Pet. Corp.'s No. 1 R. O. Jordan Fee, W. Donoho Survey.
Drlg. shale 4,003 ft.

Pierce Junction—Harris County

J. S. Abercrombie's No. 5 John Ritter, 259 ft. SW of No. 4, 1,047 ft. NE along SE line out of SW cor. of 160-ac. tract, thence 93 ft. NW at R/A, Sec. 51, J. Hamilton Sur.
Drlg. shale 4,613 ft.

Gulf Prod. Co.'s No. 11 H. C. Cain, 290 ft. from W line, thence 439 ft. at R/A to N line of 130-ac. tract, Jas. Hamilton Sur. No. 98.
Drlg. shale 6,313 ft.

Gulf Prod. Co.'s No. 40 E. R. Taylor, 89.5 ft. along E line of E. R. Taylor's 560-ac. tract from SW cor., south offset to Hamil & Smith's No. 1 Howe.
T.D. 6,542 ft.; top sand 6,533 ft.; cmtd. csg.; W.O.C.

Hamil & Smith's No. 1 C. W. Mowery, 50 ft. out of NE cor. of 600-ac. tract, Sec. 53, J. Hamilton Sur.
Coring shale 7,106 ft.

W. H. Holland et al's No. 1, I.&G.N.R.R., 330 ft. from S line of Jas. Hamilton Sur.
Coring 2,729 ft.

Rio Bravo Oil Co.'s No. 28 Settegast, 1,010 ft. W and 460 ft. N from most southerly SE corner of "B" Lease, J. Kopmen Sur.
Drlg. shale 1,884 ft.

Humble—Harris County

Sun Oil Co.'s No. 77 River, 50 ft. from W line, 250 ft. due W of No. 75, Robert Dunman Sur.
Drlg. sand and shale at 1,090 ft.

Sun Oil Co.'s No. 30 Bender, 2,393 ft. N, 3,980 ft. W of most northerly SE cor. of lease; B. Adams Sur.
Drlg. hard sand 2,847 ft.

Mykawa—Harris County

Alpha Pet. Co.'s No. 1 Waggenhausen, C of E½ Lot 10, F. J. Rothas Sur.
T.D. 4,681 ft.; P.B. 4,564 ft.; swabbing.; 7-in. csg. 4,516 ft.

Danciger O. & R. Co.'s No. 3 Minnetex, 661 ft. due E of No. 1, thence 150 ft. at R/A, Blk. 254, W. H. Lovett Sur.
T.D. 4,836 ft.; 7-in. csg. 4,810 ft.

Flannigan Drlg. Co.'s No. 1 Minnetex, 150 ft. out of NE cor. of Blk. 261, Wm. Lovett Sur.
Spudded.

Sterling Oil & Refg. Co.'s No. 2 Williams, 250 ft. from N and E line of Wm. Lovett Sur.
T.D. 4,659 ft.; running 7-in. csg.; would not flow.

West Prod. Co.'s No. 1 Irwin, W. B. Walker Sur.
T.D. 4,447 ft.; I.P. 30 bbls. per hour through ⅝-in. choke.

West Prod. Co.'s No. 2 Pratt, 488 ft. from S line, 200 ft. from W line of lease, W. B. Walker Sur.
T.D. 4,540 ft.; 7-in. csg. 4,370 ft.; W.O.C.

West Prod. Co.'s No. 1 W. Slang, John R. Hall Sur., Blk. 7.
Drlg. shale 6,310 ft.

Tomball—Harris County

Amerada-Stanolind O. & G. Co.'s No. 2 W. H. Doyle, 357 ft. from E and W lines, 466 ft. from N line of 24-ac. tract, J. House Sur.
T.D. 5,585 ft.; 7-in. csg. 5,575 ft.; flowed some oil and went dead; T.P. 1,800 lbs.; C.P. 1,800 lbs. Comp. for gas well.

Humble O. & R. Co.'s No. 2 Faus, 466 ft. from S line, 1,764 ft. from W line of W. Usener Sur.
10¾-in. csg. at 951 ft.; drlg. shale 4,177 ft.

Humble O. & R. Co.'s No. 1 Lemburger, 228 ft. NE of SW line, 228 ft. SW of NE line, 363 ft. NW of SE line of 20.24-ac. tract in E. Smith Sur.
Drlg. 45 ft.

Humble O. & R. Co.'s No. 1-B Weindorf, 466 ft. E of W line, 259 ft. S of N line, G. Goodrich Sur.
10¾-in. csg. 954 ft.; drlg. shale 2,998 ft.

Humble O. & R. Co.'s No. 3 Scherer, 389 ft. E of easterly W line, 260 ft. W of E line, 532 ft. NW at R/A to N line of J. House Sur.
Drlg. shale 5,295 ft.

Humble Oil & Refg. Co.'s No. 4 Kuehn, 466 ft. from N line, 1,031 ft. due West of No. 2, W. Usner Sur.
T.D. 5,543 ft.; I.P. 15 bbls. per hour, ¼-in. choke; 595 lbs. T.P., 560 lbs. C.P.

Humble Oil & Refg. Co.'s No. 2 Milo, 1,213 ft. S of N line, 466 ft. W of most westerly E line of 246-ac. tract, C. N. P. Lot Sur.
T.D. 5,549 ft.; 7-in. csg. at 5,549 ft.; I.P. 22 bbls. per hour, ¼-in. choke; 950 lbs. T.P., 1,000 lbs. C.P.

Shell Pet. Corp.'s No. 2 Theis, 2,332 ft. N and 393 ft. W of SE cor. of lease, J. House Sur.
T.D. 5,592 ft. oil sand; comp., no gauge.

Vanderbilt—Jackson County

Phillips Pet. Co.'s No. 2 Tuney, 330 ft. each way out of E cor. of 64-ac. tract, or 414 ft. SE of No. 1, R. Musquis Sur.
Drlg. 50 ft.

Big Hill—Jefferson County

Yount Lee Oil Co.'s No. 1-B Pipkin & Davis, 2,225 ft. from E line and 2,335 ft. from N line of survey, Wm. McFadden Sur.
Drlg. shale 4,793 ft.

Fannett—Jefferson County

J. S. Aber's No. 1 Junker, 50 ft. by 50 ft. out of NW cor. of Junker 430-ac. tract, W. H. Smith League.
Rigging up.

Gulf Prod. Co.'s No. 5 Junker.
Coring sand 5,665 ft.

Cleveland—Liberty County

Black Gold Pet. Oil Corp.'s No. 2 R. D. McDonald, 466 ft. W of most westerly E line and 466 ft. N of most northerly S line of survey, 933 ft. W of Gulf Prod. Co.'s No. 7-C Kirby Lbr. Co., T. Devers Sur.
Derrick.

Gulf Prod. Co.'s No. 2 McDonald, 3,569 ft. W along S line from most easterly SE cor. of survey and 1,286 ft. N at right angles, Charles Smith Sur.
Abd. 6,006 ft.

William J. Colegrove et al's No. 1 State School Land & Dev. Co., 446 ft. from W line and 170 ft. from S line of survey, Clayton Harper Sur.
Location.

Esperson—Liberty County

General Crude's No. 1 Heavaty, 467 ft. out of SE cor. of F. M. Gardner Sur.
Drlg. lime 1,771 ft.

General Crude Oil Co.'s No. 21 Esperson.
Preparing to core 6,621 ft.

General Crude Oil Co.'s No. 10 Davis, 2,000 ft. from E line, 660 ft. from S line of D. Kokernut Sur.
Drlg. shale 8,175 ft.

Hankamer—Liberty County

Eastman-Ward's No. 1 R. E. Lee, 115 ft. from N line of lease and 76 ft. W of west bank of White Bayou, Geo. Stengler Sur.
Rig up.

Eljean Oil Co.'s No. 2 S. E. Ezzell, 130 ft. from N and S line of 10-ac. lease, Levi Barrow Sur.
Location.

Gulf Prod. Co.'s No. 1-B W. L. Bingle, 150 ft. E along S line of H.&T.C. Sur., thence 378 ft.
Drlg. shale 6,644 ft.

Gulf Prod. Co.'s No. 21 E. W. Boyt, 110 ft. from W line of Amos Allen Sur.
Location.

W. C. Hall's No. 1 Ainsworth, 150 ft. out of NE cor. of 50-ac. tract, Andrew Weaver Sur.
Rig up.

Sterling O. & R. Co.'s No. 1 George Stengler, 100 ft. out of most westerly NE cor. of Geo. Stengler Sur.
Derrick.

Will Strozier et al's No. 1 Ezzell, 700 ft. N of S line, 150 ft. W of E line of Levi Barrow Sur.
Derrick.

Wilson Roach Oil Co.'s No. 2 Marrs-McLean, 513.4 ft. from W line, 100 ft. from E line, Levi Barrow Sur.
T.D. 4,297 ft.; fishing for swab line.

Hull—Liberty County

Fondren & Snowden's No. 2 Humble-Hooks, 50 ft. from S line, 300 ft. NW of No. 1, J. Devore Sur.
S.D. 802 ft.

Van Vleck—Matagorda County

Skelly Oil Co.'s No. 3 Cobb "B," 2,750 ft. from NW line, 2,900 ft. from SW line of M. Cummins Sur.
T.D. 7,564 ft.; tested salt water on drill stem test; waiting orders.

Conroe—Montgomery County

Humble Oil & Refg. Co.'s No. 2 Bailey, 2,412 ft. E of easterly W line, 622 ft. N of S line, R. Kuykendall Sur.
Rigging up.

Humble Oil & Refg. Co.'s No. 75 South Texas Co., 466 ft. N of S line, 1,660 ft. W of No. 64, 1,353 ft. E of W line of Sur., Theo Blade Sur.
T.D. 5,060 ft.; I.P. 26 bbls. per hour, ½-in. choke, 360 lbs. T.P., 775 lbs. C.P.

Sun Oil Co.'s No. 10 Keystone Mills.
Derrick.

Sun Oil Co.'s No. 12 Keystone Mills.
Drlg. shale 5,139 ft.; 7-in. csg. at 5,000 ft.

Sun Oil Co.'s No. 19 Foster.
Rigging up.

Splendora—Montgomery County

Bryce McCandless et al's No. 1 Texas Long Leaf Lbr. Co., 330 ft. from N and E lines of the W½ of Blk. No. 3, Walker County School Land Sur.
Derrick.

Orange—Orange County

Trio Oil Co.'s No. 1 D. S. Comier, 69 ft. W of E line and 39 ft. S of N line of 6.83-ac. tract in W. M. Dyson Sur.
S.D. 3,005 ft.

Fort Neches—Orange County

Texas Co.'s No. 5-B (second), 897.5 ft. S, 850 ft. W from most westerly NE cor. of "B" Lease.
Drlg. shale and lime 4,790 ft.

Texas Co.'s No. 5 Stark, 400 ft. from S and 125 ft. from E line of lease, M. E. Hall Sur.
Drlg. sand and shale 3,096 ft.

Texas Co.'s No. 4-B Polk, 750 ft. S and 1,450 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.

Texas Co.'s No. 6-B Polk, 750 ft. S and 250 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.

Livingston—Polk County

Gem Oil Co.'s No. 4 Watt, 660 ft. N of No. 3, 990 ft. from W line of lease, A. Viesca Sur.
Location.

Gem Oil Co.'s No. 6 Davis & Holmes, 652 ft. from W and 662 ft. from N line of survey, A. Viesca Sur.
Rig up.

Hawkeye Pet. Co.'s No. 1 L. C. Howard, 365 ft. from E line, 330 ft. from S line of 75-ac. tract, A. Viesca Sur.
T.D. 4,235 ft.; 7-in. csg. 4,223 ft.; I.P. 15 bbls. per hour through ¼-in. choke.; T.P. 850 lbs.; C.P. 900 lbs.

Hawkeye Pet. Co.'s No. 2 Howard, 365 ft. from E line of lease, 695 ft. N of No. 1, A. Viesca Sur.
Building Derrick.

Humble Oil & Rfg. Co.'s No. 11 Granbury, 932 ft., SE of No. 10, 466 ft.; SW of NE line of Sec. 10, A. Viesca Sur.
10¾-in. csg. 576 ft.

Humble Oil & Refg. Co.'s No. 12 Granbury, 933 ft. N of No. 9, A. Viesca Sur.
Location.

Humble O. & R. Co.'s No. 10 Granbury, 466 ft. NW and 466 ft. SW from S cor. of L. C. Howard 75-ac. tract, A. Viesca Sur.
T.D. 4,208 ft.; I.P. 8 bbls. per hour through ¼-in. choke.

Kettle & Gymosky's No. 1 Kingsbury, 330 ft. from N and W lines of Blk. 19, A. Viesca Sur.
Total depth 4,362 ft.; 6⅝-in. csg. 4,352 ft.; W.O.C.

Ownby Drlg. Co. No. 3 Pratt, 660 ft. W of No. 2, 330 ft. S of N line, A. Viesca Sur.
T.D. 4,280 ft., preparing to make D.S.T. in saturated oil sand from 4,197-4,217 ft.

Refugio—Refugio County

Houston Oil Co.'s No. 28 P. H. Rooke, 550 ft. SW of No. 7, 660 ft. NW of No. 22, Thomas Mullen Grant.
Drlg. shale 1,025 ft.

Houston Oil Co.'s No. 11 Wilson Heard, 330 ft. S of center of N line on 5-ac. lease, Refugio townsite.
T.D. 4,942 ft.; I.P. 63 bbls. in 6 hours through ¼-in. choke, 310 lbs. W.P., 500 lbs. C.P.

McFaddin-O'Connor Districts—Victoria and Refugio Counties

Texas Co.'s No. 9 McFaddin, 1,850 ft. N, 2 deg., 45 ft. S from No. 2.
7-in. csg. 6,196 ft.; T.D. 6,276 ft.; P.B. to 4,448 ft.; swbd. S.W.; P.B. 2,472 ft.; Rig up to pump.

Clay Creek—Washington County

Pompy et al's No. 1 Klatte, J. F. Perry League, 150 ft. each way out of NW cor. of 50-ac. tract.
Rig up.

Sun Oil Co.'s No. 15 Janner.
Coring 1,083 ft.

Louise—Wharton County

Pure Oil Co.'s No. 4 Kountze, 990 ft. NE, 990 ft. SE of W corner of 240-ac. tract, Morris & Cummings Sur.
Preparing to core at 5,090 ft.

Pure Oil Co.'s No. 1 J. H. Roberts, 990 ft. SW and 660 ft. SE of N cor. of 80-ac. tract, Morris & Cummings Sur.
Derrick.

Pure Oil Co.'s No. 2 Weever, 1,980 ft. SW, 990 ft. NW of E cor. of Sec. 23, J. M. Brownson Sur.
W.O.C. at 73 ft.

Shell Pet. Corp.'s No. 1 A. and E. Steves, 1,400 ft. E and 1,200 ft. S of NW cor. of 1,279.4-ac. lease, J. J. Dillard Sur.
T.D. 5,127 ft., drlg. in sidetracked hole at 4,455 ft.

Pierce—Wharton County

Texas Co.'s No. 3-A Pierce, 1,320 ft. N 38 degrees E from discovery well in I.&G. N. Sur. No. 39.
Reaming to straighten hole 811 ft.

Bayou St. Dennis—Terrebonne Parish

Texas Co.'s No. 2 Bayou St. Dennis, 466

ft. N and 1,194 ft. W of SE cor. of Sec. 19-17-24.
T.D. 6,479 ft., prepare to sidetrack junk.

LOUISIANA

Bay St. Elaine—Terrebonne Parish

Texas Co.'s No. 1 Riggolets, 150 ft. W and 230 ft. S of NE cor. Sec. 30-17-24.
Drlg. shale 7,350 ft.

Texas Co.'s No. 3 School Board, Sec. 16-22s-18e.
Location.

Texas Co.'s No. 10 State, 4,550 ft. E and 4,595 ft. S of NW cor. of Sec. 17-22s-18e.
Drl. shale 4,730 ft.

Caillou Island—Terrebonne Parish

Texas Co.'s No. 21 Caillou Island.
Cored sand 4,139-4,144 ft.

SOUTH LOUISIANA FIELDS

Black Bayou—Cameron Parish

Shell Pet. Corp.'s No. 23 Watkins, 1,683 ft. E, 1,825 ft. S of NW cor. Sec. 17-12-12.
Coring sandy shale 4,572 ft.

Shell Pet. Corp.'s No. 24 Watkins, 3,833 ft. W, 695 ft. S of NW cor. Sec. 18-12-12.
Rig up.

Shell Pet. Corp.'s No. 22 Watkins, 2,230 ft. W and 1,340 ft. S of NE cor. Sec. 18-12s-12w.
T.D. 4,416 ft.; running screen and liner to test.

Shell Pet. Corp.'s No. 3 State.
T.D. 7,807 ft., B.B. and coring shale 5,900 ft.

Bosco—Acadia and St. Landry Parishes

Superior Oil Prod. Co.'s No. 3 Prejean, 3,715 ft. S, 808 ft. E of NW cor. of SE¼ of Sec. 34-8s-3e.
Reaming 8,607 ft.

Superior Oil Prod. Co.'s No. 10 Larcade, 1117 ft. S, 3,345 ft. E of NW cor. of Sec. 35-8s-3e.
Coring shale 7,784 ft.

Superior Oil Prod. Co.'s No. 3 Kahn, 2,893 ft. N and 300 ft. W of SE corner of Sec. 33-8s-3e.
T.D. 8,695 ft.; 7-in. csg. 8,685 ft.; preparing to swab.

Superior Oil Prod. Co.'s No. 2 Altmond, 3,390 ft. S, 512 ft. W from NE cor. of Sec. 33-8s-3e.
T.D. 8,678 ft.; 7-in. csg. 8,651 ft.; I.P. 147 bbls. in 24 hours through 15-64-in. choke; T.P. 100 lbs., C.P. 1,525 lbs.

Superior Oil Prod. Co.'s No. 10 Hernandez, 2,125 ft. N, 1,155 ft. W from SE cor. of NW¼ Sec. 34-8s-3e.
T.D. 7,851 ft.; 7-in. csg. 7,841 ft.
Comp., no gauge.

Superior Oil Prod. Co.'s No. 5 Iseringhausen, 2,662 ft. S, 686 ft. E out of NW cor. of Sec. 35-8s-3e.
T.D. 8,709 ft.; 7-in. csg. 8,702 ft.; fishing.

Superior Oil & Prod. Co.'s No. 1 M. Benoit, 1,165 ft. W of SE cor., 2,320 ft. N, Sec 34-8s-3e.
Reaming 7,928 ft.

Superior Oil & Prod. Co.'s No. 8 Hernandez, 105 ft. E, 219 ft. N of SW cor. of NW¼ Sec. 34-8s-3e.
T.D. 8,620 ft.; 7-in. csg. 8,600 ft.

Superior Oil Prod. Co.'s No. 2 Le Blanc, 1,693 ft. S, 937.09 ft. W of NE cor. Sec. 33-8s-3e.
T.D. 8,664 ft.; 7-in. csg. 8,647 ft.; W.O.C.

Darrow—Ascension Parish

Humble O. & R. Co.'s No. 3 Gumble, 850 ft. E from center line of R-W along the Rose-Gumble property, 72 ft. NW at R/A Sec. 33-10s-2e.
Drlg. shale 5,702 ft.

Humble O. & R. Co.'s No. 4 Community, 4,825 ft. from NE cor. and 283 ft. S of N line at R/A, Sec. 33-10s-2w.
Digging cellar.

Cameron Meadows—Cameron Parish

Magnolia Pet. Co.'s No. 12 Cameron Meadows, 423 ft. E of No. 11.
T.D. 3,334 ft.; W.O.C.

Burton Sutton Oil Co.'s No. 7 School land.
Drlg. shale 3,430 ft.

Choctaw Dome—Iberville Parish

Standard Oil Co.'s No. 1 Myrtle, 900 ft. N and 550 ft. W of SE cor. of SW¼ of Sec. 52-9s-11e.
Drlg. shale 1,213 ft.

Dog Lake—Terrebonne Parish

Texas Co.'s No. 11 State, 1,100 ft. N, 2,476 ft. W of SE cor. of Sec. 21-21s-16e.
S.D. 2,014 ft.

Four Isle—Terrebonne Parish

Texas Co.'s No. 8 La. Land & Expl. Co., 2,177 ft. E, 1,385 ft. S of NW cor. Sec. 24-21s-16e.
Rig up.

Texas Co.'s No. 5 State, 885 ft. S, 2,327 ft. E of NW cor. of Sec. 24-21s-16e.
Location.

Garden Island Bay—Terrebonne Parish

Texas Co.'s No. 16 Garden Island.
Drlg. shale 3,841 ft.

Texas Co.'s No. 13 State, 3,391 ft. S and 1,604 ft. W of NE cor. Sec. 107-23-32.
Rig up.

Gueydan—Vermillion Parish

Pure Oil Co.'s No. 6, Alliance Trust, 667 ft. E, 1,787 ft. S line of lease, Sec. 34-11s-1w.
T.D. 9,543 ft.; ran 1,516 ft. of 7-in. csg., 3½-in. liner and screen on bottom of 3½-in. drill pipe; washed down to 9,565 ft., hit shoulder at 9,450 ft. coming out of hole.

Hackberry—Cameron Parish

Gulf Refg. Co.'s No. 19 Erwin, 1,315 ft. W along S line of the SE cor. of Sec. and 960 ft. at R/A to S line, Sec. 13-12-10w.
Drlg. shale and lime 4,766 ft.

Texas Co.'s No. 14 State, 500 ft. SE of No. 13, Sec. 13-12s-10w.
Fishing 4,943 ft.

Texas Co.'s No. 15 State, Sec. 13-12s-10w.
Drlg. shale 6,300 ft.

Yount Lee Oil Co.'s No. 13 Gulf Land, Sec. 14-12s-10w.
Drlg. shale.

Yount Lee Oil Co.'s No. 1-A Gulf Land, 2,000 ft. S and 50 ft. E of the NW cor. of Sec. 22-12-10.
Rig up.

New Iberia—Iberia Parish

Hells' No. 1 Sabatoir, 900 ft. N and 1,210 ft. E of SE cor. of Sec. 53-12s-7e.
Drlg. shale 3,820 ft.

Iberia Oil Corp. and Y. D. Spell's No. 2 Bernard, 150 ft. E of No. 1, Sec. 54-12s-7e.
S.D. 2,846 ft.; salt.

Iowa—Calcasieu and Jeff Davis Parish

Shell Pet. Corp.'s No. 17 Heyd.
Coring shale 6,667 ft.

Jennings—Acadia Parish

Yount Lee Oil Co.'s No. 15 Houssiere-Latriele.
Drlg. shale 3,100 ft.

Lake Hermitage—Plaquemines Parish

Humble O. & R. Co.'s No. 1 State Land, 1,080 ft. E, 200 ft. N of Texas Gulf No. 6, Sec. 11-18s-25e.
Rig up.

Lake Barre—Terrebonne Parish

Texas Co.'s No. 35 Lake Barre.
Sidetracking 3,690 ft.

Texas Co.'s No. 36 Lake Barre.
T.D. 3,788 ft.; W.O.C.

Leesville—Lafourche Parish

Gulf Prod. Co.'s No. 6 Allen Lane, Sec. 26-21s-22e.
T.D. 3,744 ft.; to deepen.

Texas Co.'s No. 23 Leesville, 975 ft. S, 1,975 ft. W of NW cor. of SW¼ Sec. 26-21-22.
Location.

Texas Co.'s No. 32 Leesville, 890 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-21s-22e.
Rig up.

Texas Co.'s No. 33 Leesville, 1,590 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-1s-22e.
Rig up.

Texas Co.'s No. 36 Leesville, 476 ft. E, 385 ft. E of NW cor. SW¼ Sec. 26-21s-22e.
Coring sand showing oil and water at 4,182 ft.

Texas Co.'s No. 37 Leesville, 1,266 ft. N, 102 ft. W of SE cor. NE¼ Sec. 27-21s-22e.
Drlg. sandy shale 4,729 ft.

Texas Co.'s No. 27 Leesville.
T.D. 4,567 ft.

Lockport—Calcasieu Parish

Union Sulphur Co.'s No. 6 Moss, located between No. 2 and No. 5 (W.O.).
Drlg. shale 6,710 ft., no report.

Roanoke—Jefferson Davis Parish

Classel et al's No. 1 La. Irrigation Mill Co., 695.5 ft. E and 475 ft. N of SW cor. Sec. 1-9s-4w.
10¾-in. csg. 2,250 ft.

Humble Oil & Refg. Co.'s No. 4 Devilbiss, 440 ft. S of N line and 440 ft. W of E line of Sec. 14-9s-4w.
Coring shale and lime 8,200 ft.

Humble O. & R. Co.'s No. 1 Clayton, 2,233 ft. from S line, 440 ft. from E line, Sec. 10-9s-4w.
Coring shale 8,781 ft.

Humble O. & R. Co.'s No. 2 C. N. Taylor, 1,320 ft. E, 440 ft. S of NW cor. of SW¼ Sec. 12-9s-4w.
Rig up.

Humble O. & R. Co.'s No. 1 Nelson Thomas, 880 ft. W of No. 2 Kratzer, 440 ft N and W of SE cor. of 200-ac. tract.
Drlg. hard sdy. shale at 10,115 ft.

Shell Pet. Corp.'s No. 1 Jarnigan, 330 ft. E, 660 ft. S, NW cor. Sec. 12-9s-4w.
Drlg. shaley sand; no show at 10,225 ft.; ran electrical test.

Shell Pet. Corp.'s No. 1-B Kratzer, 660 ft. N, 330 ft. E of SW cor. of SW¼ Sec. 1-9s-4w.
T.D. 8,828 ft.; P.B. to 8,765 ft.; reaming to make test.

Sweet Lake—Calcasieu Parish

Pure Oil Co.'s No. 12 Gulf Land, 800 ft. S, 66 deg. 42 ft. E of No. 12, Sec. 13-13-13.
Bldg. derrick.

Sulphur—Calcasieu Parish

Union Sulphur Co.'s No. 308 fee.
Drlg. sandy shale 4,749 ft.

Union Sulphur Co.'s No. 312 fee.
Drlg. sand with show of oil 3,261 ft.

Union Sulphur Co. s No. 311 fee.
W.O.C. 2,810 ft.

White Castle—Iberville Parish

Shell Pet. Corp.'s No. 8 Wilbert.
W.O.C. 5,611 ft.

Shell Pet. Corp.'s No. 1 White Castle Shingle Co., 1,320 ft. W, 100 ft. S from NE cor. of lease.
Fishing 5,160 ft.

Shell Pet. Corp.'s No. 1 Adams, 2,340 ft. N, 100 ft. E of SW cor. of lease.
T.D. 8,919 ft.; 7-in. csg. 8,889 ft.; testing csg.

Miscellaneous Wildcats

TEXAS

Austin County

Paul English et al's No. 1 Felix Guhn, 1,000 ft. S, 360 ft. E from NW cor. of 71-ac. tract, D. Chomel Sur., 1 mile SE of Kinney.
Rig up.

R. L. Wheelock et al's No. 1 Nancy Harrigat, 330 ft. each way out of the east cor. of the 78-ac. tract, Benj. Babbitt Sur.
10¾-in. csg. 300 ft.; T.D. 957 ft.

T. F. Wood et al's No. 1 Trenchman, 330 ft. from SE line of a 50-ac. tract, James Cummins Sur.
S.D. 325 ft.

Brazoria County

Amerada Pet. Corp.'s No. 2 Houston Farms Dev. Co., 2,150 ft. SE, 5,800 ft. SW of N cor. of B.B.B.&C. Sur., in the Perry & Austin Sur.
Drlg. shale 5,690 ft.

George Strake's No. 2 Truska, 991 ft. W of No. 1, H.T.&B. Sur., Sec. 7.
S.D. 6,000 ft.

Showers & Moncrief's No. 1 Hughey, 5,500 ft. NW of discovery well, in center of Lot 18, H.T.&B. Sur., Sec. 29, Abst. 202.
Location.

Texas Co.'s No. 1 Freeport Sulphur Co., 2,764 ft. N, 1 deg., 40 ft. W and 1,134 ft. S, 88 deg., 20 ft. W of NW cor. of S. F. Austin Sur., Abst. No. 35, being in the Conception Areola Sur.
T.P. 4,544 ft.; P.B. to 3,969 ft; perforated csg. from 3,425-55 ft.; shut in, prepare to pump by air lift.

Quintana Pet. Co.'s No. 1-B G. L. Wood, 2,778 ft. from W line and 5,555 ft. from S line of 1,483-ac. lease, Thomas Alsbury Sur.
S.D. 6,460 ft.

Calhoun County

Continental Oil Co.'s No. 2 American National Realty Co., 660 ft. from NW line, 660 ft. from NE line of Sec. 6, Blk. C, Pedro Garcia Sur.
S.D. 6,532 ft.

Chambers County

R. A. Mason et al's No. 1 R. M. White, 3,125 ft. N of S line, 466 ft. W of E line of James McGahey Sur.
T.D. 7,034 ft. oil sand; 7-in. csg. 7,003 ft.; flowed 1,460 bbls. through various chokes; T.P. 2,100 lbs.; C.P. 2,600 lbs.

Colorado County

Clyde Creighton et al's No. 1 Witte, 150 ft. S and E of most westerly NW cor. of H. White Sur.
10-in. csg. 341 ft.; T.D. 352 ft.

Coyle & Concord's No. 1 fee, 550 ft. from N line, 1,950 ft. from E line of Sec. 45, L.&G.N. Sur.
10¾-in. csg. 610 ft.; T.D. 698 ft.

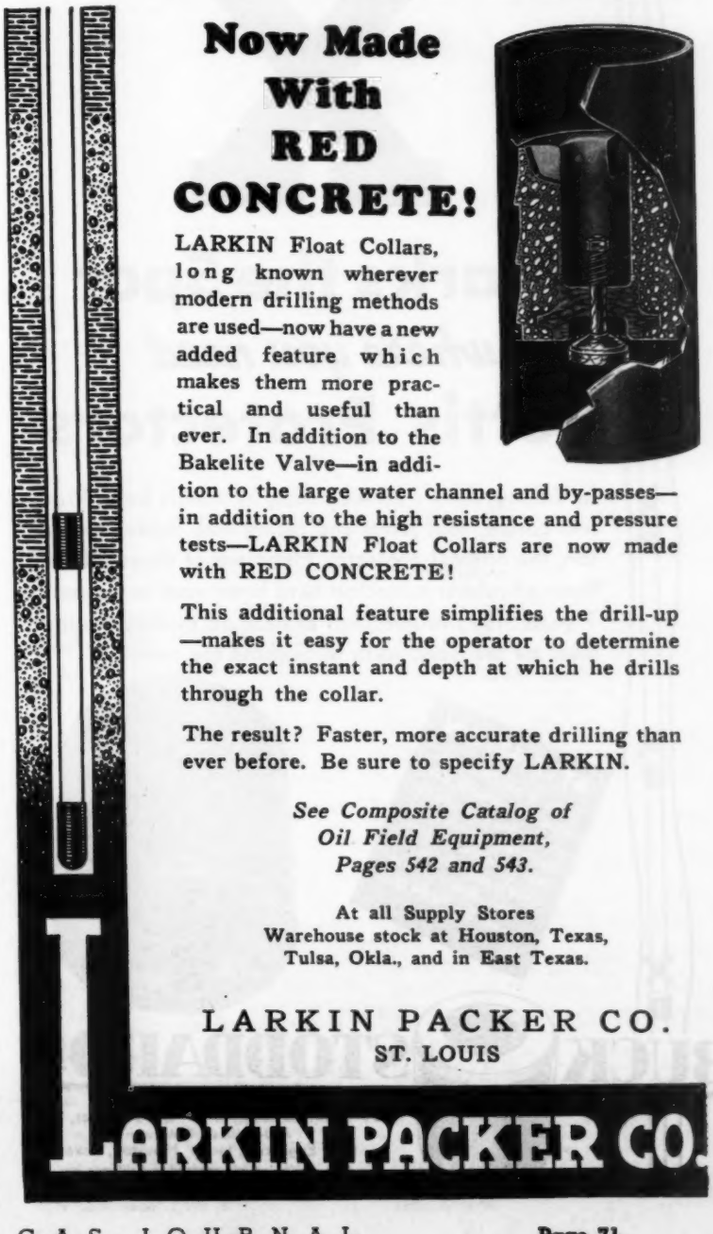
Mid-Continent Oil Co.'s No. 1 D. E. Burnhardt-Scherz, 330 ft. out of the most southerly SE cor. of a 270-ac. tract, J. Cummins Sur.
Moving in rig.

Trans. State Oil Co.'s No. 1 Frank Weinkuhn, 150 ft. E of W line, 150 ft. S of N line of 150-ac. tract, F. A. Zimmershield Sur.
Abnd. 3,761 ft.

Fayette County

Lewis Franklin's No. 1 V. Dybala, center of 75-ac. lease, A. Thompson Sur.
Location.

LARKIN Float Collars



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Fort Bend County

W. A. Shafer et al's No. 1 V. B. Bortash, 493 ft. SW of NE line and 1,003 ft. NW of SE line of Sec. 52, H.&T.C. Sur.
S.D. 2,900 ft.

George White et al's No. 1 M. M. Cravins, 1,000 ft. from N, 300 ft. W of SW cor. of survey, B.B.B.&C. Sur. No. 8.
Rig up.

Galveston County

Coast Pet. Co.'s No. 1 Stewart, 3,416 ft. S, 200 ft. E of NW cor. of 142-ac. tract, W. K. Wilson Sur.
T.D. 8,551 ft.; 5 3/16-in. csg.; perforated csg. with 36 holes from 8,510-35 ft.; comp. for gas well; slight show of distillate through 16/64-in. choke; T.P. 2,700 lbs.; C.P. 1,650 lbs.

Grimes County

Dillinger & Hammer's No. 1 L. P. Lane, 150 ft. S of N line and 150 ft. W of E line of 65-ac. tract, R. P. Stewart Sur. Derrick.

Hubert Holt et al's No. 1 Simon Fuqua, 1,200 ft. N of S line and 400 ft. W of E line of 177-ac. lease and survey, Moses Evans Sur.
S.D. 3,080 ft.

Dr. Marshall et al's No. 1-B Todd, 300 ft. from E line and 175 ft. from N line of 150-ac. tract in extreme NW cor. of county (25 ft. N of No. 1).
S.D. 2,815 ft.

Patton et al's No. 1 Yeager, 1,000 ft. W of E line, 170 ft. S of N line of 53-ac. tract and survey, A. Ruscoile Sur., NW of Iola Sur.
S.D. 1,000 ft.

Harris County

Cockburn Oil Co.'s No. 1 R. E. Brooks, 330 ft. N of N bank of Bayou, 330 ft. from WL of R. E. Brooks, "A" tract. Location.

Graham & Gardner's No. 1 Hager, 150 ft. out of SE cor. of 736.8-ac. tract, J. W. Clepton Sur.
T.D. 6,010 ft.; may abandon.

C. C. Foster et al's No. 1 H. K. Johnson, 2,000 ft. from S line and C of E and W lines of G.C.&S.F. Sur.
Drilled 25 ft. and S.D.

Stanolind Oil & Gas Co.'s No. 1 F. J. Burkey, C of Lot 15, Blk. 105, H.T.&B. Sur. No. 5.
Location.

Stanolind Oil & Gas Co.'s No. 1 C. F. Gibson, C of Lot 9, Blk. 41, H.T.&B. Sur. No. 5.
Location.

Stanolind Oil & Gas Co.'s No. 1 J. W. Horlow, C of Lot 10, Blk. 82, H.T.&B. Sur. No. 5.
Location.

Stanolind Oil & Gas Co.'s No. 1 Ed Wells, C of Lot 3, Blk. 16, H.T.&B. Sur. No. 5.
Location.

Stanolind O. & G. Co.'s No. 1 First Natl. Bank of Houston, 950 ft. from NE line, 990 ft. from SE line of 119.6-ac. tract, Callahan and Vance Sur.
16-in. csg. 97 ft.; T.D. 110 ft.

E. E. Young, tr.'s No. 2 P. S. Griffith, 3,476 ft. S of N line, 2,030 ft. E of W line of A. R. Bodman Sur.
S.D. 1,465 ft.

Jackson County

A. M. Harris' No. 1 Whitley, 800 ft. out of SE cor. of P. G. Keller Sur. Location.

Shell Pet. Corp.'s No. 1 Combs, 466 ft. EW line, 2,500 ft. NE line of 242.75-ac. tract, M.&C. Sur., Sec. 33.
W.O.C. 1,219 ft.

Jasper County

Marathon Oil Co.'s No. 1 Jasper County Lumber Co., 330 ft. out of NE cor. of 176.5-ac. tract 5 miles SE of Jasper, T. C. Holmes Sur.
Rig up.

Jefferson County

Humble O. & R. Co.'s No. 1 J. T. White, 330 ft. out of SW cor. of T.&N.O.R.R. Sur. No. 370.
Moving in rig.

Sun Oil Co.'s No. 1 Hebert & Braussard, 6,890 ft. NW along SW line and 660 ft. NE at right angles to SW line, B. Blackman Sur., Abst. No. 2.
Drlg. rock 6,021 ft.

Liberty County

R. M. Bruner et al's No. 1 N. Bell, 150 ft. from N line and 150 ft. from W line of Bell's 187-ac. tract, H.&T.B. Sur. No. 4.
Rigging up.

Extension Oil Co.'s No. 1 J. A. Lovett, 330 ft. from E and 600 ft. from S line of lease, P. P. Deevers Sur.
S.D. 4,048 ft.

J. W. Frazier et al's No. 2 Lynott & Buffum, 466 ft. from N and E lines of 60-ac. tract in extreme SE part of survey, James Robeson Sur.
T.D. 7,850 ft.; sidetracked and drilled to 7,685 ft., flowed 650 bbls. in 46½ hrs. through various chokes; T.P. 1,000 lbs.; C.P. 1,225 lbs.

D. H. Furse's No. 1 J. F. Kover, 300 ft. out of SW cor. of 100-ac. tract, J. R. Mayhon Sur.
Location.

Liberty-Independent Oil Co.'s No. 1 J. M. Neal, 3,550 varas from E line and 505 varas from N line of Samuel Strong Sur.
Reaming 4,150 ft.

A. L. Maxwell's No. 1 M. P. Hinchliff, 200 ft. from E line and 1,000 ft. from the N line of survey, H.&T.C. Sur., Sec. 10a.
Coring shale 5,526 ft.

Thomas et al's No. 1-A Eicke, 660 ft. from W line and 2,350 ft. from S line of tract in Green Sur.
T.D. 5,047 ft.; 6⅝-in. csg. at 5,029 ft.

Turnbull & Irwin's No. 1 Cox, 1,000 ft. from the E line and 200 ft. from S line of 108.2-ac. lease, F. J. G. Smiley Sur. Location.

Matagorda County

Continental Oil Co.'s No. 1 Feife, J. S. Criswell Sur., 3,000 ft. E of W line, 2,800 ft. N of S line of survey.
T.D. 6,073 ft.; 11¾-in. csg. 6,072 ft.; W.O.C.

Dr. Griffith's No. 1 fee, 3,000 ft. from E line and 3,040 ft. from W line of Wm. H. Bell Sur.
Rig up and S.D.

Helmerich & Payne's No. 1 Hawkins, 350 ft. S. 70 deg. W of Cockburn Oil Co.'s No. 6 Hawkins.
T.D. 5,122 ft.; drill stem stuck at 2,500 ft.; fishing.

Horace M. Smith, Inc.'s No. 1 Wadsworth ranch, 150 ft. out of S cor. of Lot No. 8, S. R. Fisher Sur.
T.D. 8,415 ft.; 7-in. csg. 8,376 ft.; flows estimated 25 bbls. of oil by heads at intervals.

Montgomery County

Travis Baker et al's No. 1 Foster Estate, 1,200 ft. E of W line and 700 ft. S of N line of Blk. No. 50, J. M. De La Garza Sur.
Derrick.

E. E. Bayland's No. 1 C. S. Atkinson, 220 ft. E of T.&B.B. R.R., and 650 ft. S of N line of Robbins George Sur. on 207-ac. tract N of Pinehurst.
Drlg. shale 5,023 ft.

Mid-Texas Oil Co.'s No. 1 Deltz Land & Timber Co., 560 varas from W line, 200 varas from S line of Robert F. Oliver Sur.
Moving in rig.

Paul Sanderson, trustee's No. 1 Texas Long Leaf Lbr. Co., 3,500 ft. W, 1,750 ft. S of NW cor., Wm. Barker Sur.
Cored salt water sand from 5,987-5,991 ft.; coring sand 5,995 ft.

T. T. Word, trustee's No. 1 Delta Land & Timber Co., John Hostetter Sur.
Drlg. shale 700 ft.

Orange County

Blue Line Oil Co.'s No. 1 Godwin, Richard Ballew Sur., 300 ft. from E line and 180 ft. from NE line of Godwin 20-ac. tract.
S.D. 2,770 ft.

Ellis Oil Co.'s No. 1 G. W. Pell, 100 ft. from N and 300 ft. from W line of Pell tract in the J. M. Henerie Sur.
S.D. 2,035 ft.

T. T. Word Trustee's No. 1 Delta Land & Timber Co., John Hostetter Sur.
Derrick.

Polk County

Howard Daily et al's No. 1 Z. B. Knox, 1,450 ft. W and 1,920 ft. S of NE cor. of F. Chairs Sur., 16 miles NE of Corrigan.
S.D. 60 ft.

J. F. Anderson's No. 1 E. L. Duke (O.W. D.D.), 400 ft. from E and 350 ft. from S of SW cor. of P. Michelick 50-ac. lease, Abst. 59, P. J. Mineral Sur.
Waiting on a new mud pump; T.D. 6,304 ft.

J. W. Leggett et al's No. 1 Bergman, C of 294-ac. tract, or 1,100 ft. W of H.E.&W.T. R.R., J. T. Pinkney Sur.
Drlg. shale 3,553 ft.

Dick Schwab's No. 1 Lynch, 330 ft. out of NW cor. of 200-ac. tract in the George Jameson Sur.
Location.

Refugio County

Cecil Hagen et al's No. 1 Edith Clarkson, 1,736 ft. from N line, 3,820 ft. from E line of J. Coughlin Sur.
Location.

Robertson County

H. L. Patton's No. 1 H. Ely, located on a 616-ac. tract, A. Manchola Sur.
S.D. 3,820 ft.

San Jacinto County

Ralph Sturam et al's No. 1 R. B. Love et al, 475 ft. S of N line and 2,000 ft. W of E line of 177-ac. tract, Drury McGee Sur.
Moving in rig.

Trinity County

Gulf Prod. Co.'s No. 4 Trinity, 4,539 ft. N along W line of SW cor. of Sur. and 330 ft. E at right angles to said line, Drlg. sand 2,813 ft.

Victoria County

Eastern States Pet. Co.'s No. 1 Henderson & Pickering, 330 ft. out of NW cor. of Lot 19, Wm. Rupley Sur.
Abandoned 6,041 ft.

Costa Oil Co.'s No. 1 Schovjasa, 330 ft. out of N cor. of Lot No. 14, Wm. Rupley Sur.
T.D. 4,790 ft.; P.B. to 4,775 ft., I.P. 4 bbls. of distillate in 24 hours through ⅛-in. choke, 1,800 lbs. T.P., 1,900 lbs. C.P.

Eastern States Pet. Co.'s No. 1 Williams, 330 ft. out of S cor. of 130-ac. tract, E. Benavides Sur.
T.D. 4,748 ft.; 7-in. csg. from 4,736-48 ft.

L. A. Gillespie and Superior Oil & Gas Co.'s No. 1 R. W. Brandt, 330 ft. from NE line, 330 ft. from NW line of tract No. 11, Henderson & Pickering Subd., Wm. Rupley Sur.
T.D. 6,255 ft.; drlg. 3,638 ft. in sidetracked hole.

Magnolia Pet. Co.'s No. 1 Henderson & Pickering, E offset to discovery well, Wm. Rupley Sur.
Drlg. shale 6,410 ft.; P.B. 4,788-95 ft.; ran 15 minutes, D.S.T. ½-in. on top, ⅝-in. on bottom, showed 150 ft. of mud.

Martex Oil Co.'s No. 1 Mitchell, 330 ft. S of W line and 330 ft. N of W line of 500-ac. tract, E. Benavides Sur.
T.D. 5,337 ft.; prepare to deepen.

E. L. Smith's No. 1 Lela.
Coring shale 4,774 ft.

Washington County

Sterling Oil & Refg. Co.'s No. 1 Frank Janik Sr., 1,859 ft. from N line, 467 ft. W from SE cor. of Janik tract, Johathan Scott Sur.
Spudded.

SOUTH LOUISIANA

Acadia County

Continental Oil Co.'s No. 1 T. Ortego, 990 ft. S, 500 ft. E of NW cor. SW¼ Sec. 28-7s-2w.
T.D. 8,308 ft., oil sand; 7-in. csg. 8,297 ft.

Avoyelles Parish

Southern State Pet. Co.'s No. 1 Boyette, 330 ft. N and 330 ft. E of SW cor. Sec. 28-3n-5e.
S.D. 3,887 ft..

Beauregard Parish

Richardson & Martin's No. 1 Southwest Lbr. Co.
Location.

Calcasieu Parish

Fred Oil Co.'s No. 2 Faist, 262 ft. E and 83 ft. S of NW cor. SE¼ Sec. 26-8s-10w.
S.D. 3,568 ft.

Fohs Oil Co.'s No. 1 Airhart, 275 ft. W and S of NE cor. SW¼ SE¼ Sec. 14-9s-8w.
Drlg. shale 7,302 ft.

Nicholas McCaleb's No. 1 Grey, 2,200 ft. S, 1,200 ft. E of NW cor. Sec. 22-8s-13w.
Drlg. gumbo 1,430 ft.

Texas Co.'s No. 5 Nickerson, 2,826 ft. N, 2,192 ft. W of SE cor. of Sec. 12-10s-8w.
Drlg. shale 4,576 ft.

Texas Co.'s No. 6 Nickerson, 287 ft. N, 289 ft. W of SE cor. of NW¼ Sec. 12-10s-8w.
Location.

Union Sulphur Co.'s No. 12 State.
Drlg. sand and gravel 446 ft.

Union Sulphur Co.'s No. 3 Castle, 1,350 ft. W, 150 ft. N of SE cor. of NW¼ Sec. 14-9s-8w.
Drlg. shale 5,919 ft.

Union Sulphur Co.'s No. 3 Mayo-Reeves, 1,064 ft. S and 1,041 ft. E of NW cor. of Sec. 12-9-8.
T.D. 6,778 ft.; cleaned out to 6,212 ft.

Union Sulphur Co.'s No. 3 Powell, 2,383 ft. S, 2,901 ft. E of NW cor. Sec. 12-9s-8w.
Location.

Union Sulphur Co.'s No. 11 State, 2,137 ft. S, 1,539 ft. E of NW corner of Sec. 12-9s-8w.
Drlg. shale and lime at 6,662 ft.

Union Sulphur Co.'s No. 2 Mayo Reeves.
Drlg. shale 6,284 ft.

Union Sulphur Co.'s No. 7 State, 1,316 ft. N and 199 ft. E of the SW cor. of Sec. 12-9s-8w.
Location.

Union Sulphur Co.'s No. 9 State, NW offset

X
Marks the Spot
where you need
Bettis Protectors
In drilling, there's no such thing as straight hole. Protect collars, tool joints and casing with Bettis Protectors, the original protector. Hundreds of thousands of these all-rubber protectors have been used in the past 7 years. They're specified as standard drilling equipment on the deep wells throughout the country.
ATTENTION
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607 Richfield Bldg., Los Angeles, Calif.
Mid-Continent Distributor:
Gulf Engineers, Inc., Houston, Texas
Also distributed and serviced in California by:
Elliott Core Drilling Co., Los Angeles

to Texas Co.'s No. 3 Nickerson.
T.D. 6,755 ft., washed to 6,760 ft.
Wheeler Oil Corp.'s No. 1 School Lot, 1,705 ft. E, 1,335 ft. N of SW cor. Sec. 16-9s-7w.
S.D. 3,720 ft.

Cameron Parish

Magnolia Pet. Co.'s No. 1 J. B. Broussard, 330 ft. E and S. out of NW cor. of the SW¼ of SE¼ of Sec. 13-12s-9w.
T.D. 7,890 ft.; stuck drill stem second time, fishing.
Steinberger Pet. Co.'s No. 1 Drew, 330 ft. out of NW cor. NE¼ of Sec. 26-10s-11w. Location.

East Baton Rouge Parish

Superior Oil & Prod. Co.'s No. 1 Duplanter-Community, 1,500 ft. westerly along the N line from the NE cor. of D. A. and E. A. Duplanter's 130.7-ac. tract, thence 330 ft. at R/A.
T.D. 7,741 ft.; P.B. 4,350 ft.; prepare to sidetrack.

East Feliciana Parish

Thompson Creek Oil Co.'s No. 1 Fannie Noland, 2,600 ft. E and 1,580 ft. N of SW cor. Sec. 70.
S.D. 1,589 ft.

Evangeline Parish

Little Pigeon Oil Co.'s No. 1 McHugh, 1,300 ft. S, 229 ft. W of the NE cor. Sec. 26-12s-10e.
S.D. 3,165 ft.

Iberia Parish

Meade Oil Co.'s No. 1 Hamilton, near town of Lose, in the NW cor. of parish, Sec. 38-12-5.
S.D. 200 ft.

Texas Co.'s No. 1 State Pausse Point.
Drlg. shale 4,760 ft.

J. S. Watterman No. 1 Bancroft, 75 ft. E of W line of property and 50 ft. N of Lake Poigneur, Sec. 4-13s-5e.
Drlg. 1,200 ft.; no report.

Jefferson Davis Parish

Howard Naylor et al's No. 1 Johnson-Bordeaux, 1,734 ft. N, 52 deg. N, 45 min. E, and 1,853 ft. S, 37 deg. 15 min. E out of SW cor. Sec. 29-10s-3w.
T.D. 800 ft.; W.O.C.

LaFourche Parish

Coastal Oil Co.'s No. 2 Constantine, 1,476 ft. N, 809 ft. E of SW cor. Sec. 26-21-22e.
Location.

St. Bernard Parish

Emerald Pet. Corp.'s "Shell Beach Properties" No. 1, on S edge of Bayou Louis, Sec. 31-13s-15e.
Drlg. shale 7,530 ft. (corrected).

St. Martin Parish

Texas Co.'s No. 7 St. Martin Land, 2,042 ft. N, 500 ft. W of SE cor. of Sec. 17-8s-7e.
Drlg. water sand 7,438 ft.

Plaquemines Parish

Southern Sulphur Co.'s No. 1 Manhattan Fruit Co.
Rigging up.

Vermilion Parish

Delcambre & Shelton's No. 1 Adam Delcambre, south degrees E, 825 ft. from most northerly cor. of irregular Sec. 63-17-5.
Drlg. shale 1,510 ft.

CALIFORNIA WILDCATS

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Shell Oil Co., No. 5 Capitan, Santa Barbara Co.	5- 4-30	2,260	cmtd. 2,245
Shell Oil Co., No. 6 Capitan, Santa Barbara Co.	5- 4-30	....	foundation
Shell Oil Co., No. 7 Capitan, Santa Barbara Co.	5- 4-30	....	location
General Petroleum, No. 15 Capitan, Santa Barbara Co.	32- 5-30	323	cmtd. 187
Shell Oil Co., No. 1 Goleta, Santa Barbara Co.	10- 4-29	1,472	redrlg. 1,300
Honolulu Oil Corp., No. 9 Elwood, Santa Barbara Co.	tideland	3,480	sd. sh. drlg.
Barnsdall-Rio Grande, No. 12 Elwood, Santa Barbara	tideland	4,920	sd. sh. drlg.
Barnsdall-Rio Grande, No. 2 Elwood, Santa Barbara.	15- 4-29	6,492	suspended
Bankline Oil Co., No. 10 Elwood, Santa Barbara Co.	tideland	3,630	sd. sh. drlg.
Signal Oil & Gas Co., No. 4 Elwood, Santa Barbara Co.	tideland	3,766	flow 1,200 b.d.
Pacific Western, No. 15 Elwood, Santa Barbara Co.	tideland	2,791	sd. sh. drlg.
Las Posas Pet., No. 1 Las Posas, Ventura Co.	22- 3-20	8,116	recmtd. 7,255
Calco Pet. Co., No. 1 Las Posas, Ventura Co.	17- 3-20	3,861	sd. sh. drlg.
Union Oil Co., No. 1 Bardsdale, Ventura Co.	12- 3-20	3,600	bailing
Dabney, H. R., No. 1 Bardsdale, Ventura Co.	2- 3-19	510	suspended
Texas Co., No. 1 Fillmore, Ventura Co.	29- 4-19	....	rigging up
Bankline Oil Co., No. 1 South Mountain, Ventura Co.	3- 3-19	....	rigging up
Texas Oil Co., No. 1 South Mountain, Ventura Co.	4- 3-19	7,423	P. B. 5,265
Paloma Oil Co., No. 1 Susana, Ventura Co.	12- 2-18	2,386	sd. sh. drlg.
Hull, James, No. 1 Susana, Ventura Co.	2- 2-18	....	port. outfit
Ventura Expl. Co., No. 1 Saticoy, Ventura Co.	30- 3-22	....	bldg. rig
Prop. Service Corp., No. 1 Lloyd, Ventura Co.	24- 3-23	8,760	gr. sd. drlg.
General Pet., No. 1 Oxnard, Ventura Co.	26- 2-23	1,398	sd. sh. drlg.
Continental Oil Co., No. 4 San Miguelito, Ventura Co.	23- 3-24	5,260	hd. sd. drlg.
Standard Oil Co., No. 1 Lost Hills, Kern Co.	2-26-20	5,430	sd. sh. drlg.
Continental Oil Co., No. 1 McDonald, Kern Co.	7-28-20	5,305	dry; abd.
Continental Oil Co., No. 2 McDonald, Kern Co.	18-28-20	....	rigging up
Belmac Drlg. Co., No. 1 McKittrick, Kern Co.	22-29-21	2,860	sd. sh. drlg.
General Pet. Co., No. 1 South Belridge, Kern Co.	30-28-21	11,377	suspended
Standard Oil Co., No. 2-A North Belridge, Kern Co.	36-27-30	8,184	sd. sh. drlg.
Standard Oil Co., No .3 North Belridge, Kern Co.	36-27-30	2,593	sd. sh. drlg.
Belridge Oil Co., No. 32-35 North Belridge, Kern Co.	35-27-20	7,327	br. sh. drlg.
Ohio Oil Co., No. 1 Maricopa Flats, Kern Co.	11-11-12	....	bldg. rig
Belridge Oil Co., No. 33-35 North Belridge, Kern Co.	35-27-20	6,975	br. sh. drlg.
Union Oil Co., No. 19 North Belridge, Kern Co.	36-27-20	5,253	sd. sh. drlg.
Union Oil Co., No. 20 North Belridge, Kern Co.	36-27-20	5,140	cmtd.
Woods & Bailey, No. 1 McFarland, Kern Co.	16-26-26	....	rigging up
Republic Pet. Co., No. 1 McFarland, Kern Co.	20-26-27	....	bldg. rig
Cimarron Oil Corp., No. 1 Delano, Kern Co.	14-25-27	2,440	suspended
Standard Oil Co., No. 1 Delano, Kern Co.	1-25-23	2,455	gas; shut in
Standard Oil Co., No. 2 Delano, Kern Co.	1-25-23	3,256	gas; shut in
Standard Oil Co., No. 4 Delano, Kern Co.	34-24-23	2,460	gas; shut in
Trico Oil & Gas Co., No. 1 Delano, Kern Co.	3-25-23	2,525	gas well
Trico Oil & Gas Co., No. 3 Delano, Kern Co.	36-24-22	4,835	suspended
Trico Oil & Gas Co., No. 5 Delano, Kern Co.	3-25-23	2,467	gas well
Baker, Cliff, No. 1 Poso Creek, Kern Co.	33-27-28	1,684	rig to pump
Carrec Oil Co., No. 1 Kern Front, Kern Co.	10-28-27	....	rigging up
Kern River Oilfields, No. 3 Kern Front, Kern Co.	25-28-27	2,105	completing
Associated Oil Co., No. 2 Kern Front, Kern Co.	4-28-27	2,105	sd. sh. drlg.
C. C. M. Oil Co., No. 4 Kern Front, Kern Co.	23-28-27	1,875	sd. sh. drlg.
Republic Petroleum, No. 2 Kern Front, Kern Co.	24-28-27	2,109	pump 298 b.d.
Republic Petroleum, No. 3 Kern Front, Kern Co.	24-28-27	....	rigging up
Barnsdall Oil Co., No. 4 Mountain View, Kern Co.	32-20-29	5,212	redrlg. 2,984
Canal Oil Co., No. 1 Mountain View, Kern Co.	30-30-29	....	rigging up
C. C. M. Oil Co., No. 1 Mountain View, Kern Co.	11-30-28	5,905	sd. sh. drlg.
Texas Co., No. 5 Mountain View, Kern Co.	15-30-28	5,496	test W.S.O.
Hogan, Dana, No. 1 Mountain View, Kern Co.	32-30-29	....	bldg. rig
Union Oil Co., No. 8 Mountain View, Kern Co.	23-30-28	6,775	sd. sh. drlg.
General Petroleum, No. 4 Mountain View, Kern Co.	14-30-28	5,628	pump. test
Mohawk Oil Co., No. 10 Mountain View, Kern Co.	30-30-29	5,749	sd. sh. drlg.
Mohawk Oil Co., No. 12 Mountain View, Kern Co.	30-30-29	4,375	sd. sh. drlg.
Mohawk Oil Co., No. 13 Mountain View, Kern Co.	30-30-29	....	bldg. rig
Standard Oil Co., No. 8 Mountain View, Kern Co.	23-30-28	5,600	cleaning out
Standard Oil Co., No. 9 Mountain View, Kern Co.	24-30-28	5,241	sd. sh. drlg.
Standard Oil Co., No. 10 Mountain View, Kern Co.	23-30-28	2,782	cmtd. 1,196
Standard Oil Co., No. 11 Mountain View, Kern Co.	24-30-28	....	bldg. rig
Wood-Callahan Oil Co., No. 1 Mountain View, Kern Co.	25-30-28	3,372	sd. sh. drlg.
Ohio Oil Co., No. 1 Mountain View, Kern Co.	33-30-29	5,999	suspended a
Mountain View Oil Co., No. 1 Mountain View, Kern Co.	25-30-28	5,650	fishing
United Expl. Co., No. 1 Bakersfield, Kern Co.	23-30-27	950	cmtd. 650
Jergins Trust Co., No. 6 Edison, Kern Co.	24-30-29	1,315	suspended
Jergins Trust Co., No. 9 Edison, Kern Co.	24-30-29	391	sd. drlg.
Monterey Expl. Co., No. 8 Edison, Kern Co.	14-30-29	....	bldg. rig
Sunday, G. M., No. 1 Edison, Kern Co.	5-30-30	501	cleaning out
Nelco Oil Co., No. 1 Edison, Kern Co.	5-30-29	4,116	dry; abd.
General Pet., No. 5 Edison, Kern Co.	15-30-29	3,753	wet; recmtd.
General Pet., No. 6 Edison, Kern Co.	24-30-29	1,284	cmtd. 1,223
Appling, C. E., No. 1 Edison, Kern Co.	4-30-29	3,587	pump 20 b.d.
Berry Oil Co., No. 1 Edison, Kern Co.	10-30-29	3,486	sd. sh. drlg.
Woodward Oil Co., No. 3 Edison, Kern Co.	36-29-29	685	suspended
Woodward Oil Co., No. 4 Edison, Kern Co.	36-29-29	480	to abdn.
Lucas, Don, No. 1 Edison, Kern Co.	26-29-29	600	suspended
General Pet., No. 1 Arvin, Kern Co.	1-32-29	6,864	sd. sh. drlg.
Hall-Baker Co., No. 1 Arvin, Kern Co.	16-31-30	1,250	suspended
Hall-Baker Co., No. 3 Arvin, Kern Co.	21-31-30	1,870	suspended
Hutcheson & Osborne, No. 1 Arvin, Kern Co.	32-30-30	1,100	cmtd. 871
Milham Expl. Co., No. 1 Buttonwillow, Kern Co.	6-28-23	....	rigging up
Superior Oil Co., No. 1 Semi-Tropic, Kern Co.	23-27-23	2,364	sd. sh. drlg.
Superior Oil Co., No. 2 Semi-Tropic, Kern Co.	34-27-24	....	location
Fullerton Oil Co., No. 1 Semi-Tropic, Kern Co.	1-27-22	2,391	gas; shut in
Fullerton Oil Co., No. 2 Semi-Tropic, Kern Co.	14-27-23	2,463	gas; shut in
Fullerton Oil Co., No. 3 Semi-Tropic, Kern Co.	9-27-23	3,150	gas; shut in
Fullerton Oil Co., No. 4 Semi-Tropic, Kern Co.	26-27-23	2,395	gas; shut in
Fullerton Oil Co., No. 5 Semi-Tropic, Kern Co.	8-27-23	2,347	gas; shut in
Fullerton Oil Co., No. 6 Semi-Tropic, Kern Co.	25-27-23	2,441	gas, shut in
Fullerton Oil Co., No. 7 Semi-Tropic, Kern Co.	25-27-23	2,437	cmtd. 2,325
Fullerton Oil Co., No. 8 Semi-Tropic, Kern Co.	35-27-23	....	bldg. rig
Fullerton Oil Co., No. 9 Semi-Tropic, Kern Co.	26-27-23	....	material
Fullerton Oil Co., No. 10 Semi-Tropic, Kern Co.	15-27-23	....	rigging up
Standard Oil Co., No. 2 Semi-Tropic, Kern Co.	5-27-23	4,343	reaming
Standard Oil Co., No. 3 Semi-Tropic, Kern Co.	7-27-23	2,355	gas; shut in
Standard Oil Co., No. 4 Semi-Tropic, Kern Co.	9-27-23	3,398	cmtd. 3,192
Standard Oil Co., No. 5 Semi-Tropic, Kern Co.	9-27-23	3,651	sd. sh. drlg.
Standard Oil Co., No. 6 Semi-Tropic, Kern Co.	8-27-23	2,361	cmtd. 2,292
Standard Oil Co., No. 7 Semi-Tropic, Kern Co.	1-27-23	1,960	sd. sh. drlg.
Standard Oil Co., No. 8 Semi-Tropic, Kern Co.	12-27-22	2,426	gas; shut in
Standard Oil Co., No. 9 Semi-Tropic, Kern Co.	1-27-23	....	bldg. rig
Standard Oil Co., No. 10 Semi-Tropic, Kern Co.	17-27-23	....	location
Milham Expl. Co., No. 1 Semi-Tropic, Kern Co.	15-27-23	3,122	gas; shut in
Milham Expl. Co., No. 2 Semi-Tropic, Kern Co.	15-27-23	2,429	gas; shut in
Milham Expl. Co., No. 3 Semi-Tropic, Kern Co.	15-27-23	....	rigging up
Tejon Ridge Oil Co., No. 1 Comanche, Kern Co.	23-32-23	1,930	fishing
Shell Oil Co., No. 1 Buena Vista, Kern Co.	9-32-25	7,770	hd. sd. drlg.
Ohio Oil Co., No. 2 Buena Vista, Kern Co.	32-31-26	1,008	sd. sh. drlg.
Bender, E. L., No. 1 Temblor, Kern Co.	2-29-20	952	suspended
Reserve Oil & Gas Co., No. 1 Tejon, Kern Co.	2-10-19	2,699	pump 45 b.d.
Reserve Oil & Gas Co., No. 3 Tejon, Kern Co.	12-10-19	1,800	hd. sd. drlg.
Silver Gate Oil & Gas Co., No. 1 Tejon, Kern Co.	7-10-19	1,450	sd. sh. drlg.
Hall-Baker Co., No. 1 Tejon, Kern Co.	12-11-19	98	sd. drlg.
Taft Well Drlg. Co., No. 1 Kreyenhagen, Fresno Co.	33-22-16	3,450	sd. sh. drlg.
Pacific Expl. Co., No. 1 Kreyenhagen, Fresno Co.	17-21-17	235	sd. sh. drlg.
Union Oil Co., No. 1 Lillis-Kettleman, Fresno Co.	24-21-16	10,944	redrlg. 8,811
K. N. D. A., No. 54 Kettleman-North, Fresno Co.	24-21-16	6,296	sd. sh. drlg.
Standard Oil Co., No. 2 Kettleman Middle, Kings Co.	29-23-19	7,551	br. sh. drlg.
Pet. Sec., No. 1 Kettleman Middle, Kings Co.	30-23-19	751	sd. sh. drlg.
Continental Oil Co., No. 1 Kettleman-South, Kern Co.	7-25-20	7,086	hd. sh. drlg.
Farrel Pet., Well No. 1, San Luis Obispo Co.	18-31-12	1,837	sd. sh. drlg.
Willett Oil Co., No. 1 Cholame, San Luis Obispo Co.	10-25-15	3,687	suspended
Kings River Oil Pool, Well No. 1, Tulare Co.	29-16-23	3,250	form. test
Commonwealth Consd. Gas, No. 1 Tulare Lake, Kings	21-22-20	2,490	gas well
Commonwealth Consd. Gas, No. 2 Tulare Lake, Kings	21-22-20	710	suspended
Dudley Ridge Dev. Co., No. 1 Dudley Ridge, Kings Co.	24-23-20	1,300	sd. sh. drlg.
Amerada Pet., No. 1 F. L. D., San Joaquin Co.	15- 2-5	5,906	recmtd. 5,680
Amerada Pet., No. 2 F. L. D., San Joaquin Co.	15- 2-5	100	sd. drlg.
Pure Oil Co., No. 1 Chowchilla, Madera Co.	7-10-14	8,402	gas well; idle
Northern Counties Pet., No. 1 Tehama, Tehama Co.	25-24-3	4,738	hd. sh. drlg.
Texas Co., No. 1 Petrolia, Humboldt Co.	1- 3-2	6,133	suspended
Shell Oil Co., No. 1 Branch, Monterey Co.	34-24-10	3,970	sd. sh. drlg.

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Allen Bros., No. 1 Athens, Los Angeles Co.	18- 3-13	....	foundation
Republic Pet. Co., No. 1 El Segundo, Los Angeles Co.	18- 3-13	6,875	hd. sd. drlg.
Colly Oil Co., No. 1 El Segundo, Los Angeles Co.	12- 3-15	....	rig suspended
Associated Oil Co., No. 4 Inglewood Deep, Los Angeles	7- 2-14	4,458	cmtd. 2,725
Scientia Oil Co., No. 1 Inglewood Deep, Los Angeles	7- 2-14	4,590	suspended
Standard Oil Co., No. 5 Inglewood Deep, Los Angeles	17- 2-14	2,311	pump 194 b.d.
Standard Oil Co., No. 7 Inglewood Deep, Los Angeles	17- 2-14	2,083	sd. sh. drlg.
Sunbar Pet. Co., No. 1 Inglewood Deep, Los Angeles	16- 2-14	....	rig suspended
Allied Pet., No. 1 Del Rey, Los Angeles Co.	28- 2-15	6,709	suspended
Blackline Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,634	fish D.P.
Crest Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	3,620	sd. sh. drlg.
Lucas, Andrew, No. 1 Del Rey, Los Angeles Co.	25- 2-15	3,581	sd. sh. drlg.
Red Seal Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,297	sd. sh. drlg.
Mathews Pet. Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,523	suspended
Birch Royer Oil Co., No. 1 Del Rey, Los Angeles Co.	34- 2-15	6,532	redrl. 5,881
Joyce Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,742	P.B. 6,700
Royalty Serv. Corp., No. 3 Del Rey, Los Angeles Co.	27- 2-15	6,515	cmtd. 6,300
Union Oil Co., No. 13 Del Rey, Los Angeles Co.	27- 2-15	6,306	sd. sh. drlg.
Union Oil Co., No. 14 Del Rey, Los Angeles Co.	27- 2-15	3,891	sd. sh. drlg.
Union Oil Co., No. 15 Del Rey, Los Angeles Co.	27- 2-15	750	cmtd.
Del Rey Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,192	sd. sh. drlg.
Treasure Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	50	tech. spud
Winoco Oil Co., No. 1 Del Rey, Los Angeles Co.	26- 2-15	....	foundation
West American Oil Co., No. 1 Bandini, Los Angeles	17- 2-12	....	rigging up
Western Gulf, No. 1 Bandini, Los Angeles Co.	16- 2-12	6,575	sd. sh. drlg.
Vanco Dev. Co., No. 1 Artesia, Los Angeles Co.	25- 3-12	5,698	sd. sh. drlg.
Monarch Oil Corp., No. 1 Topango, Los Angeles Co.	5- 1-16	207	sd. drlg.
Caminol Co., No. 1 Montebello, Los Angeles Co.	9- 2-11	....	location
Texas Co., No. 1 Montebello, Los Angeles Co.	5- 2-11	5,297	hd. sd. drlg.
Texas Co., No. 2 Montebello, Los Angeles Co.	5- 2-11	....	rigging up
Universal Consd., No. 2 Montebello, Los Angeles Co.	5- 2-11	1,480	sd. sh. drlg.
Universal Consd., No. 4 Montebello, Los Angeles Co.	5- 2-11	....	bldg. rig
Woodward Oil Co., No. 1 Montebello, Los Angeles Co.	4- 2-11	3,220	P.B. 3,167
Wilshire Oil Co., No. 1 Montebello, Los Angeles Co.	5- 2-11	4,000	hd. sd. drlg.
Frontier Oil Co., No. 1 Pico, Los Angeles Co.	7- 2-11	4,098	sd. sh. drlg.
Pressell & Tull, No. 1 Puente, Los Angeles Co.	30- 2-9	4,431	D.P. froze
International Dev. Co., No. 2 Saugus, Los Angeles Co.	34- 5-16	....	bldg. rig
Great Coastal Oil Co., No. 1 Elsinore, Riverside Co.	36- 5-5	1,702	sd. sh. drlg.
Huntington Cent. Oil Co., No. 1 Newport, Orange Co.	29- 6-10	....	rig suspended
Wilshire Oil Co., No. 1 Newport, Orange Co.	29- 6-10	1,797	br. sh. drlg.
Viking Oil Co., No. 1 Richfield, Orange Co.	29- 3-9	3,000	cleaning out
Hillman & Long, No. 1 San Juan, San Bernardino	2- 3-8	....	rigging up

LA.-ARK. WILDCATS

(Rotary operations unless otherwise designated)

NORTH LOUISIANA

Avoyelles Parish

Bell Oil Co.'s No. 2 Thompson-Koltz, 450 ft. S, 350 ft. E, NW cor. Sec. 11-2n-5e.
Partly R.U. and S.D.

Southern Star Pet. Co.'s No. 1 O. G. Boyette, Sec. 28-3-5e.
S.D. 3,875 ft.

Bossier Parish

Bossier O. & G. Co.'s No. 3 Sherrill, 330 ft. N and W, SE cor. Sec. 13-19-12.
Drlg. 1,046 ft.

W. A. Kirkland's No. 1 Jarrett & McKeller, 330 ft. N and W, S cor. NW NW Sec. 3-21-13.
S.D. 2,410 ft.

Leonard Co.'s No. 1 Pearson, 250 ft. S and E of C Sec. 22-21-14.
T.A. 2,421 ft.

W. E. Neil's No. 1 Curtis Plant, Sec. 19-17-12.
Set 12-in. 200 ft.

Plain Dealing Synd.'s No. 1 Dodson, 330 ft. S and E, NW cor. SW SE Sec. 25-23-13.
Set 10-in. 290 ft.; drlg. 1,054 ft.

Producers O. & G. Co.'s No. 1 Edwards, 660 ft. N and W, SE cor. Sec. 27-18-11.
Set 12½-in. 208 ft.

Richplane Oil Co.'s No. 1-A S. H. Bollinger, Sec. 22-23-13.
S.W. and abnd. 3,142 ft.

R. L. Skidmore et al's No. 1 Davis, Sec. 12-18-13.
S.D. 2,250 ft.

Caddo Parish

Nick Babare's No. 2 Gibbs, 175 ft. E. 275 ft. S, NW cor. NE SE Sec. 16-20-15.
Set 10-in. 42 ft.; drlg. 1,360 ft.

J. Ed Bailey, tr.'s No. 1 Hartso, NW cor. NE NW Sec. 28-22-16.
S.D. 1,236 ft.

Cal-La. Devel. Co.'s No. 1 Glassell, NW NE Sec. 11-19-15.
Set 10-in. 40 ft.

Holly Oil Co.'s No. 1 Thigpen & Herold, Sec. 15-20-15.
S.D. 2,283 ft.

F. D. Hyde's No. 1 Thigpen & Herold, 350 ft. S and E, C Sec. 5-15-15.
S.D. 1,175 ft.

A. D. King, tr.'s No. 1 Roach, 641 ft. E, 375 ft. N, SW cor. SE Sec. 4-14-16.
Tested S.W.; arranging to deepen from 2,712 ft.

Leonard Co.'s No. 2 Dickinson, 1,650 ft. E, 1,830 ft. S, NW cor. Sec. 36-21-15.
Set 6-in. 2,217 ft.; fishing for D.S. 2,221 ft.

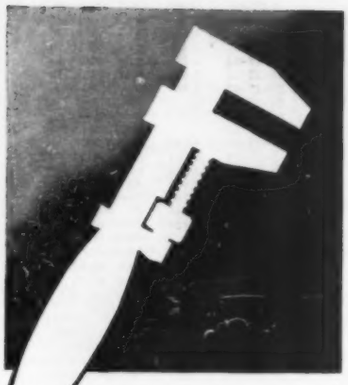
Leonard Co.'s No. 1 Muslow, NE cor. NW NE Sec. 9-20-15.
S.D. 2,147 ft.

Leonard Co.'s No. 1 M. A. Dickson, 1,650 ft. S, 1,260 ft. E, NW cor. Sec. 36-21-15.
W.O.S.R. 2,234 ft.

Leonard Co.'s No. 2 Green, SW SW Sec. 8-20-15.
Comp.; 250,000 ft. gas, 825 ft.

Murray Oil Co.'s No. 2 Noel, 495 ft. S, 735 ft. E, NW cor. SW Sec. 15-20-15.
Drlg. 2,002 ft.

Press & Lambert's No. 2 Hughes, 350 ft. N and W of C Sec. 15-20-15.
Drlg. 2,018 ft.



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Dust is raising havoc with piston rings, cylinder walls, bearings and oil consumption. The only way to protect against the ravages of grit is to equip your internal combustion engines and air compressors with an air filter that stands up.

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LIKE AUTUMN LEAVES, THE DUST IS SHAKEN OFF BY VIBRATION OF THE AIR FLOW

FOR INTERNAL COMBUSTION ENGINES, AIR COMPRESSORS, etc.

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REMEMBER—It's the smallest dust that's the worst!

2647

Recovery Oil Co.'s No. 1 W. L. Sibley, Sec. 15-19-14.
Arranging to set csg. 2,448 ft.
Texas Co.'s No. 4 School fee, Sec. 16-20-15.
Comp. pumping 40 bbls. 2,202 ft.
A. C. Scott et al's No. 1 Noel Est., 330 ft. S and E, NW cor. Sec. 22-20-15. W.O.S.R. 2,261 ft.
Shreveport Oil Corp.'s No. 5-B Muslow, Sec. 4-20-15..
Set 6-in. 2,164 ft.; drlg. plug. 2,164 ft.
Simplex Oil Co.'s No. 7 Thomas, 200 ft. N and E of C Sec. 15-20-15.
Set 6-in. 2,185 ft.; T.D. 2,202 ft.
Texas Co.'s No. 2 Thigpen, 300 ft. S and E, C Sec. 15-20-15.
Set 6-in. 2,182 ft.
C. A. Tooke's No. 1 Kinheman, 581 ft. S, 136 ft. W. NE cor. NW SW Sec. 15-20-15.
Rigging up.

Caldwell Parish

Critchell & Woods' No. 1 Kraft, 230 ft. N and W, SE cor. NW NE Sec. 18-11-3e.
Tested dry; drlg. 1,935 ft.
G. D. Davis' No. 1 La.-Central Lbr. Co., Sec. 14-11-3e.
S.D. 1,800 ft.
G. W. Zeigan et al's No. 1 La.-Central Lbr. Co., 175 ft. S and E, NW cor. SW SW Sec. 25-13-3e.
S.D. 1,200 ft.

Catahoula Parish

McIntyre et al's No. 1 Tensas, 1,740 ft. S, 990 ft. E, NW cor. Sec. 15-10-6e.
S.D. 200 ft.

Claiborne Parish

E. T. Oakes' No. 1 H. W. Patton Est., 660 ft. S and W, NE cor. Sec. 1-20-5w.
Drlg. 1,468 ft.

Desoto Parish

E. B. Bird et al's No. 1 J. H. Johns, 330 ft. N and W, center Sec. 20-14-6.
S.D.; W.O. 2,630 ft.
DeSoto Pet. Co.'s No. 1 B. Y. Wemple, C S½ SE NE SW Sec. 14-12-11.
Arranging to set csg. 2,590 ft.
P. G. Fraley et al's No. 1 G. R. Stell, 330 ft. S and W, NE cor. Sec. 5-12-16.
R.U. and S.D.
Hunter Co.'s No. 1 DeSoto, 660 ft. S, 1,320 ft. E, NW cor. Sec. 28-12-14.
Set 7-in. 2,797 ft.; T.D. 2,820 ft.
Leslie Prod. Co.'s No. 1 Ramsey, 150 ft. N and W of C Sec. 36-11-11.
Set 10-in. 45 ft.
National Oils, Inc.'s No. 1 B. Y. Wemple, NW SW Sec. 14-12-11.
S.D. 120 ft.
C. T. Ruffins' No. 1 Lee, 400 ft. S, 334 ft. E, NW cor. SW Sec. 33-14-13.
W.O.S.R. 2,842 ft.
M. L. Stephens' No. 1 Alston, 345 ft. S, 270 ft. W of C Sec. 11-11-16.
Set 10-in. 40 ft.; drlg. 375 ft.

East Carroll Parish

Century Oil & Drlg. Co.'s No. 1 Olive Dell, 660 ft. S, 300 ft. W, NE cor. Sec. 56-21-21e.
Set 10-in. 280 ft.; drlg. 2,150 ft.

Grant Parish

Alexander et al's No. 1 Maxwell, Sec. 9-9-1e.
Rigging up.

Jackson Parish

American Liberty Oil Co.'s No. 1 Lusk, C NE NE Sec. 1-16-1w.
Testing 3,592 ft. (corrected).

La Salle Parish

Fred W. Hensley's No. 1 Urania, Sec. 7-10-2e.
Rigging up.
H. L. Hunt, Inc.'s No. 1-A King, 225 ft. S, 210 ft. E, NW cor. NE NW Sec. 36-10-1e.
Recmtd. 6-in. 1,524 ft.

Lincoln Parish

Herman L. Brown's No. 1 Monstead, 1,320 ft. S, 660 ft. E of C Sec. 10-17-4w.
Rigging up.

Madison Parish

San. Land & Exploration Co.'s No. 1 Delta Land Co., Sec. 1-17-12e.
S.D. 1,625 ft. (corrected).

Morehouse Parish

J. H. Gibson, tr.'s No. 1 Thomas, 330 ft. S and W, NE cor. Sec. 16-22-7e.
Drlg. 1,780 ft.
Zeiger & Bacon's No. 2 Crossett Lbr. Co., 2,870 ft. N, 505 ft. E, SE cor. SE SW of Sec. 36, in Sec. 41.
S.D. 50 ft.

Ouachita Parish

American Liberty Oil Co.'s No. 1 Golson, C NW Sec. 25-17-1e.
Coring 3,495 ft.
J. E. Farrell & Co.'s No. 5 State of La., 1,693 ft. E, 125 ft. N, N¼ cor. Sec. 22 in Sec. 49-20-4e.
Rigging up.
Maury Drlg. Co.'s No. 5 Frierson, 660 ft. N, 10 ft. E, SW cor. NW Sec. 29-19-4e.
Set 10-in. 180 ft.; set 6-in. 2,140 ft.; comp. 1,343,000 ft. gas 2,181 ft.
Pioneer Gas Co.'s No. 1 Filhoil, 2,436 ft. N, 307 ft. W, common cor. Sec. 11-18-4e.
Comp. 2,376,000 ft. gas 2,215 ft.

Natchitoches Parish

Clyde Crichton's No. 1 Friedman Est., 406 ft. N, 428 ft. E, SW cor. Sec. 52-7-6.
Arranging run Schlumberger 3,560 ft.
Ab Jones' No. 1 Brown Lbr. Co., 406 ft. N, 330 ft. W, SE cor. Sec. 5-10-10.
S.D. 1,033 ft.
B. E. Taylor's No. 1 DeBlieux, 1,395 ft. E, 150 ft. S, NW cor. Sec. 83-10-7.
Set 12½-in. 186 ft.

Red River Parish

J. S. Tuffree's No. 1 Wilkinson, 1,320 ft. S and W, NE cor. Sec. 11-12-11.
S.D. 1,395 ft.

Sabine Parish

G. H. Collins' No. 1-C Cranford, 330 ft. S and E, NW cor. SW NW Sec. 28-9-13.
Tested S.W. 2,077 ft.
Hill Myers' No. 1 Magness, Sec. 30-9-13.
Rigging up.
M. T. Hines' No. 1 J. B. Hill, SW NE Sec. 4-6-11.
Arrng. case off S.W. 2,012 ft.
Jack Lent's No. 1 Williams, Sec. 13-7-11.
S.D. 1,820 ft.
Lee Whitehead et al's No. 2 Frost Lbr. Ind., Sec. 29-9-13.
Set 10-in. 30 ft.; drlg. 300 ft.
Windsor Oil Co.'s No. 1 Latham, 375 ft. N, 330 ft. E, SW cor. SE SE Sec. 16-9-13.
W.O.S.R. 1,980 ft.

Union Parish

Carbon Consolidated's No. 1 Feazel, 990 ft. S, 660 ft. E, C Sec. 8-20-3e.
Set 6-in. 2,089 ft.; comp. 1,250,000 ft. gas 2,139 ft.
Crescent Drlg. Co.'s No. 1 Woolie, SE cor. NW NW Sec. 34-19-1e.
Drlg. 2,580 ft.
C. H. Murphy, tr.'s No. 1 Seale, 330 ft. N and E, SW cor. SE SW Sec. 7-23-1w.
Set 10-in. 240 ft.; dry and abnd. 3,556 ft.
Southern Prod. Co.'s No. 1 Clark, 500 ft. N and W, SE cor. NW NW Sec. 17-23-1e.
S.D. 2,396 ft.
United Carbon Co.'s No. 1 Schwab, 1,320 ft. S and 660 ft. E, NW cor. Sec. 7-20-4e.
Set 12½-in. 172 ft.

Webster Parish

Burnett et al's No. 1 Fulbright, NE NE Sec. 1-18-10.
Rigging up.

ARKANSAS

Arkansas County

Grand Prairie Realty Co.'s No. 2 Fischer, 412 ft. S, 12 ft. W, NE cor. NW NW Sec. 6-6-4w.
W.O. csg. 118 ft.

Ashley County

Glenn E. McFaddin et al's No. 1 Boreine Farms, 660 ft. S and W, NE cor. Sec. 1-18-8.
S.D. 2,800 ft.
Texas-Seaboard Oil Co.'s No. 1 fee, C NW NE Sec. 28-17-4.
Drlg. 400 ft.

Columbia County

J. G. Cubage et al's No. 1 Rhea, 150 ft. N line, 330 ft. E, SW cor. SE SE Sec. 12-17-22.
Set 10-in. 180 ft.; drlg. 2,240 ft.
Southern States Gas Co.'s No. 1 Piney Woods Lbr. Co., 330 ft. N and E, SW cor. NE NW Sec. 10-20-22.
S.D. 960 ft.

Hempstead County

A. H. Bagnelle's No. 1 Trattner & Rhinehart, Sec. 2-13-26.
S.D. 1,992 ft.
F. W. Martin's No. 2 Lafferty, C NW Sec. 17-14-24.
Rigging up.

LaFayette County

Earl F. Fox' No. 2 Coleman Bros., NE NE Sec. 30-16-24.
Moving in rig.
Kamon & Neely's No. 1 Cockran, NW cor. SE SW Sec. 26-19-25.
Running Schlumberger 4,450 ft.
S.D. 4,450 ft.
Transportation Petroleum Co.'s No. 1 Cockran, 300 ft. S and W, NE cor. SE Sec. 26-19-25.
Moving in rig.

Miller County

M. D. K. Fitzwater's No. 1 E. H. Beck, 150 ft. N and E, SW cor. NW SW Sec. 34-15-26.
W.O.S.R. 2,919 ft.
King Oil Corp.'s No. 1 C. H. Schroder, 200 ft. N, 330 ft. E, SW cor. SW NE Sec. 24-14-28.
S.D. 2,167 ft.
King Oil Corp.'s No. 1 Anderson, 350 ft. E, 200 ft. S, NE cor. SW NE Sec. 16-14-27.
S.D. 2,573 ft.
Magnolia Pet. Co.'s No. 8 Olivet, 236 ft. S and W, NE cor. NW NW Sec. 3-16-26.
W.O.S.R. 2,942 ft.
Frank Roe et al's No. 1 Frost Est., 150 ft. N and W, SE cor. SE SW Sec. 3-15-26.
Set 10-in. 120 ft.
Snowden & Hill's No. 1 E. H. Beck, 255 ft. E and 330 ft. S, NW cor. SW SW Sec. 34-15-26.
Set 10-in. 120 ft.
Lee Timberlake's No. 2 Frost Est., Sec. 27-15-25.
Drlg. 1,950 ft.

Nevada County

Carnett et al's No. 1 Floyd Munin, C SW Sec. 16-14-22.
S.D. 50 ft.

Ouachita County

McCullough-Brown, Tr.'s No. 1 Rowe, Sec. 2-12-19.
Set 10-in. 21 ft.; drlg. 1,135 ft.
Snow-Black Pet. Co.'s No. 1 Bedford, 680 ft. N and 150 ft. E. SW cor. Sec. 32-11-18.
Set 10-in. 62 ft.; coring 953 ft.
W. O. White's No. 1 Parker Bros., 150 ft. S and E, NW cor. NE NE Sec. 26-13-18.
S.W. and abnd. 1,358 ft.

Poinsett County

Rockwell Development Co.'s No. 1 W. A. Smith, NE NE Sec. 13-11n-3e.
Rigging up.

Union County

Gardy Drlg. Co.'s No. 1 Craig, Sec. 35-17-15.
Testing 2,211 ft.
Gulf Ref. Co.'s No. 49 L. Werner, 4,620 ft. N, 60 ft. E, SW cor. Sec. 5-16-16.
S.D. 7,645 ft.
H. L. Hunt's No. 15 E. F. Gregory, 330 ft. N and W, SE cor. Sec. 10-17-14.
T.A. 3,478 ft.
H. L. Hunt's No. 18 E. F. Gregory, 330 ft. N and E, SW cor. Sec. 11-17-14.
Abnd.; will not drill.
Mrs. R. K. Jones et al's No 1 Davis, 330 ft. N and W, SE cor. NW NW Sec. 28-16-14.
Arranging to test 3,297 ft.
Murine Oil Co.'s No. 5-E Thompson, Sec. 10-18-13.
Set 10-in. 198 ft.; drlg. 3,100 ft.
C. E. Murdock's No. 1 Pumphrey, C SW NW NE Sec. 11-17-14.
Derrick.
F. F. Roberts et al's No. 1 Gallon Lbr. Co., 330 ft. S and E, NW cor. NW SE Sec. 10-16-14.
Set 10-in. 104 ft.

MISSISSIPPI

Amite County

Mineral Resources, Inc.'s No. 1 Anderson, C NE NW Sec. 14-3n-3e.
S.D. 550 ft.

Bolivar County

White & Jones' No. 1 Ballou, SE SE NW Sec. 17-24n-7w.
Drlg. 1,115 ft.

Clarke County

L. Beckwith et al's No. 1 Long Bell Lbr. Co., 538 ft. S, 125 ft. W of C Sec. 10-2n-16e.
T.A.; lack of funds.
Clarke County Oil Co.'s No. 1 Dora Butler, C SW SW Sec. 15-2n-16e.
Set 10-in. 63 ft.

Harrison County

Big Ridge Oil Co.'s No. 1 Hinzin, NE Sec. 13-7s-10w.
S.D.; W.O. 1,100 ft.

Lauderdale County

Bob Dalton's No. 1 Bounds, Sec. 34-7n-15e.
S.D.; W.O. 1,600 ft.

Monroe County

P. J. McAlpine's No. 1 Frank Rye, Sec. 15-15s-17w.
T.A. 2,931 ft.
P. J. McAlpine's No. 1 Crook, 1,090 ft. S. 90 ft. W, NE cor. Sec. 15-13s-13w.
Arranging set 6-in. 2,502 ft.

Rankin County

Cleve Love et al's No. 1 Ascher, 520 ft. S and E, NW cor. NE NE Sec. 18-5n-2e.
Drlg. 2,020 ft.

Simpson County

Berry Corp.'s No. 2 R. T. Berry, Sec. 33-2n-4e.
T.A. 2,510 ft.

Warren County

H. W. Elliott et al's No. 2 R. L. Parker, 780 ft. E. 1,570 ft. S. NW cor. Sec. 14-14n-1e.
S.D.; high wtr. 1,600 ft.

Washington County

Perkins & Dees' No. 1 Lee, 1,500 ft. E, 500 ft. N, SW cor. Sec. 33-15n-3w.
S.D. 2,175 ft.

Winston County

Jack Vale et al's No. 1 Moody, 713 ft. N, 667 ft. E, SW cor. NW SW Sec. 3-13n-14e.
Arranging set 6-in. 2,250 ft.

ALABAMA

Covington County

Geometer Prod. Corp.'s No. 1 Culbreath, SW cor. SW NE Sec. 8-2n-14e.
S.D. 6,300 ft.

Houston County

Rice O. & G. Co.'s No. 1 Oakley est., SE cor. NW SW Sec. 9-3n-29e.
S.D. 2,776 ft.

Lamar County

DeSoto O. & G. Corp.'s No. 1 Gardner, Sec. 22-15s-16w.
Drlg. 4,518 ft.

FLORIDA

Lake County

Oil Dev. Co. of Florida's No. 1 South Lake, SE SE Sec. 17-24s-25e.
S.D. at 1,946 ft. after coring 75 ft. of lime; awaiting acid treatment.

Walton County

Geometer Oil Corp.'s No. 2 Walton Land & Timber Co., Sec. 10-1s-19w.
Drlg. core tests on block; R.U. and S.D.

LA.-ARK. PROVEN
NORTH LOUISIANA

Caddo—Rodessa

Haynes Prod. Co.'s No. 1 W. B. Lawton, 1,980 ft. N and E, SW cor. Sec. 14-23-16.
Rigging up.
Haynes Bros. Drlg. Co.'s No. 1 Tyson, 660 ft. S and E of C Sec. 24-23-16.
Set 12½-in. 220 ft.; set 9⅝-in. 2,073 ft.;

drlg. 3,342 ft.
Ark-La Gas Co.'s No. 1 J. S. Teamer, 330 ft. N and 660 ft. W, SE cor. SW SE Sec. 13-23-16.
Derrick.
R. W. Norton's No. 1 Caddo Levee Board, 660 ft. N and W, SE cor. NE Sec. 21-23-16.
Derrick.
O'Brien Brothers' No. 1 Rodessa Oil & Land Co., 660 ft. S and 330 ft. E, NW cor. SW Sec. 14-23-16.
Derrick.
D. C. Richardson's No. 1 Caddo School Board, C S line NE SW Sec. 23-23-16.
Derrick.
United Gas Public Service Co.'s No. 1 W. M. Bremer, 1,980 ft. N and 660 ft. E, SW cor. Sec. 22-23-16.
Derrick.
United Gas Public Service Co.'s No. 1 Gibson Est., 660 ft. N, 1,980 ft. W, SE cor. Sec. 15-23-16.
Derrick.
United Gas Public Service Co.'s No. 1 Rodessa Oil & Land Co., 1,980 ft. N and 660 ft. W, SE cor. Sec. 15-23-16.
Derrick.
United Gas Public Service Co.'s No. 2 Caddo Levee Board, 1,126 ft. S, 25 ft. E, NW cor. Sec. 26-23-16.
Abnd.; will not drill.
United Gas Public Service Co.'s No. 1 D. F. Barr, 1,320 ft. N, 1,551 ft. W, SE cor. Sec. 29-23-16.
Coring 5,943 ft.
United Gas Public Service Co.'s No. 1 I. L. Young, C E½ SE Sec. 21-23-16.
Set 5-in 5,900 ft.; T.D. 6,048 ft.; testing to gauge 6,048 ft.

Sabine Parish—Zwolle

Alexander & Crane's No. 1 Fogman, SE cor. N½ SW NE Sec. 18-7-11.
S.D. 2,655 ft.
Ivan A. Allen's No. 1 La. Long Leaf, 330 ft. N and W, SE cor. NW SE Sec. 12-7-11.
Set 6-in. 2,465 ft.; drlg. 2,630 ft.
H. C. Maulding's No. 1 Davis, 350 ft. N and W, SE cor. NE NE Sec. 2-7-11.
S.D. 150 ft.
K. C. Peterson et al's No. 1 Bowman-Hicks, 330 ft. S and E, NW cor. SW NW Sec. 2-7-9.
Derrick down.
Texas Co.'s No. 1 Mary Cutrer, 666 ft. W, 671 ft. N, SE cor. NE Sec. 11-7-11.
Drlg. 2,723 ft.
Tex.-La.-Ark. Oil Co.'s No. 1 Pickering Lbr. Co., Sec. 3-3-12.
S.D. 2,742 ft.

EAST TEXAS
(Border Counties)

Harrison County

R. C. Payne et al's No. 1 Lowery, H. D. Spain Sur.
P.B. to 3,524 ft.

Marion County

Ed S. Holman's No. 1 Henderson, R. Bennington Sur.
P.B. to 2,443 ft.

Panola County

R. A. Graddy's No. 1 M. J. McCormick, J. McAdams Sur.
Moving in rig.
George Hudson et al's No. 1 J. F. Nail, C. McGeary Sur.
Set 8-in. 40 ft.; fishing for core bbl. at 2,345 ft.
Geo. Le Grand's No. 1 P. J. Wardleigh, A. Thompson Sur.
Set 10-in. 62 ft.
R. W. Price's No. 1 Crawford, J. A. Williams Sur.
Set 10-in. 64 ft.
Fred Stovall Drlg. Co.'s No. 1 H. D. Ivey, P. Martin H.R.S.
S.D. for csg. 1,980 ft.

Shelby County

Cliff Stoval's No. 1 Pickering Lbr. Co., C. H. Patterson Sur.
S.D.; rig repair. 1,485 ft.

S. W. TEXAS WILDCATS
Week Ending July 27

Bandera County

Milam Drlg. Co.'s (Plateau Oil Co.) No. 1 Garrison, G.C.&S.F. Sur. No. 506, 1,500 ft. from W and 2,970 ft. from N lines of survey.
Drlg. 3,409 ft.
Palm Winn Oil Co.'s No. 1 Watson, Sur. No. 71 (workover).
Drlg. black shale 1,987 ft.

Bastrop County

Monts & Beavens' No. 1 Leatherwood, 320 ft. from NW line and 550 ft. from NE line, Wm. McLanglin Sur.
Coring Edwards lime with odor of oil, 3,277 ft.
Wheelock & Collins' No. 1 M. T. Fowler. Serpentine 1,830-2,345 ft.; D.&A.

Bee County

G. M. Church's No. 1 J. C. Woods, 330 ft. from N line, 330 ft. W of road, J. Ryan Sur., H.&G.N.R.R., Abstract 186
Coring sand, showing gas 4,535 ft.
F. P. Hynes' No. 2 Plummer, F. J. Chessman Sur. 1, 40 ft. W of No. 1.
Drlg. 1,806 ft.
Rube Heflin's (McMurray) et al No. 1 Holzmark, 330 ft. from N and E lines of lease, offsetting Foley tract.
S.D. 4,115 ft., sand and shale.
D. V. Smith et al's No. 1 Atkins, M. M. Wood Sur.
Rig.

Bexar County

Cherokee Drlg. Co.'s No. 1 Chapman, 2,100 ft. from S line, 3,200 ft. from E line, A. J. Leslie Sur.
S.D. 400 ft.
Jas. B. Cunningham's No. 1 L. F. Ridder, 950 ft. S of Nelson Road, 1,300 ft. from E line, Block 5,196, Sur. No. 58.
Sand 485-519 ft.; S.D.
C. J. LeComte's No. 1 Herbst, 150 ft. out of SW cor. of Manuel Leal Sur.
Rigging up to deepen, 360 ft.
McPhee & Briggs' No. 1 F. Lamb, 9,200 ft. from S line, 800 ft. from W line of Sur. No. 3 (Manuel de Luna).
T.D. in chalk 2,337 ft.; running 6-in. csg. 2,315 ft.
Mid-Texas Prod. Co.'s No. 1 C. G. Walker, 330 ft. out of NE cor. Lot 21, S. M. Doble Sur. No. 79; drlg. Glen Rose lime 1,155 ft.
Carroll C. Raborn's No. 1 Claude McCauley, 150 ft. from N and NW lines of tract in Sec. 52, Wm. Harrison Sur.
S.D. 950 ft.
C. C. Raborn's No. 1 A. B. Stephens, 1,630 ft. from N line, 1,540 ft. from W line of tract, P. B. Hayes Sur. No. 3.
S.D. 415 ft.

Blanco County

H. R. Roe and W. E. Nixon's No. 1 Polk Morrisey, 2,000 ft. from W line, 1,000 ft. out of SE cor., 1,600 ft. from N line of Thomas H. Webb Sur. No. 91.
No report.

Caldwell County

O. W. Killam's No. 1 W. D. Moore, 150 ft. out of NE cor. of 44-ac. tract Jos. Burleson Sur.
Chalk 2,095-2,129 ft.; abd.

Dewitt County

Reginald F. Baurke's No. 1 W. C. Steinman Est., 937 ft. from N and S lines, Uriah Blue 1-3 League.
T.D. 115 ft.; S.D.
J. C. Crossman's No. 1 Kleberg, 2 miles NW Cuerro (old test).
T.D. 80 ft.; S.D.

Duval County

Atkins & O'Neill's No. 1 Clara Driscoll Sevier, 2,640 ft. from N, E and W lines of Sec. 7, T.&N.O. R.R. Co. Sur.
Spudded.
Benedum & Trees' No. 1 Parr, 2½ mi. SE of Benevides.
Testing sand, showing oil, 5,631 ft.
M. E. Davis' (Benedum & Trees) No. 1 G. B. Parr, 6,600 ft. from N line, 3,960 ft. from W line of tract, San Andres grant.
Drlg. 5,100 ft.
Magnolia Pet. Co.'s No. 1 D.C.R.C., 330 ft. from S & E lines of Sur. 100.
Rigging up.
Marzo Oil Co.'s No. 1 E. R. Hagist, 150 ft. from E line, 330 ft. from N line, Sec. 269, Blk. 8, Beaty, Seale & Forward Sur. M.I.M.
T. J. & M. Drlg. Co.'s No. 1 Davidson, 2,770 ft. S line, 330 ft. W line of Sur. 90.
T.D. 2,936 ft.; testing.

Fayette County

Ross Fenton's No. 1 Kasper (263-ac.), 3,000 ft. from NE line, 1,280 ft. from SW line, of Thos. Green Sur. No. 28.
Checking titles.

Frio County

Midland Oil Co.'s No. 1 San Antonio Joint Stock Land Bank, 300 ft. from NE and SE lines of 60-ac. tract, B.S.&F. Sur.
Drlg. 3,875 ft.

Goliad County

Brown & Wheeler, Inc.'s No. 1 Mrs. Jennie Ray Kauffman, 1,650 ft. from NW line, 330 ft. from NE line of 4,265.06-ac. tract.
Coring sand 4,545 ft.
Keystone Royalty Co.'s No. 1 M. Woods, SW part of county, 15,000 ft. from SW line, 5,000 ft. from NW line of J. Sherman Sur.
T.D. 5,960 ft.; fishing for core barrel.

Gonzales County

Resource Prod. Co.'s No. 1 Lanbeck, 708 ft. from NW line, 1,919 ft. from SW line, J. M. Salinas Sur.
Derrick, ready to spud.

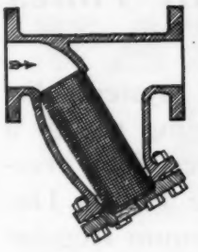
Guadalupe County

J. E. Clark's (H. H. Weinert) No. 1 Lay, 800 ft. along road from SW cor., then 150 ft., J. K. Davis Sur.
Chalk 2,371-81 ft.; 6-in. casing, 2,362 ft.; bailed dry; to drill deeper.
Bob Gode et al's No. 1 Hicks, 1,320 ft. from E line, 150 ft. from S line of 189-ac. tract in Santo Y. Coy Sur.
Drlg. lime 760 ft.
Mineral Oil Corp. of Texas' No. 1 Allen Phillips, 162 ft. from N line, 900 ft. from E line of tract, Cortinos Sur.
S.D. 888 ft.
W. T. Scrutchin's No. 1 A. H. Smith, 150 ft. from E line, 1,350 ft. from N line of 34.5-ac. tract, Jas. B. Cowan Sur.
S.D. 750 ft.
J. S. Suttle's No. 2 Baenziger, S of Seguin. Old well; R.U. to W.O.
Suttle et al's No. 1 Baenziger, 700 ft. from S line, 500 ft. from E line of 125-ac. tract, Monsola Sur.
Casing collapsed; standing 2,156 ft.

Hidalgo County

Bluff Pet. Co.'s No. 1 Porcion Land Co., 330 ft. from N and E lines of NE 100 acres of S 500 acres of Share 14, Por. 49.
T.D. 5,539 ft.; S.D.
Deering & Kayser's No. 1 Engelman, Lot 3, Blk. 70, Las Mestenas tract.
T.D. 7,508 ft.; fishing at 6,715 ft.
Downey & Morton's No. 1 Daskom, 450 ft.

STRAINERS



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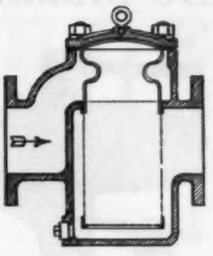

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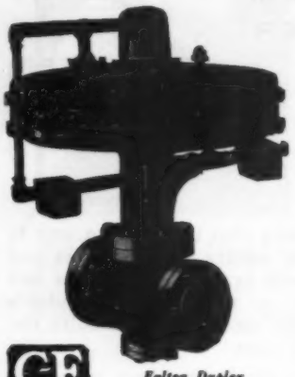

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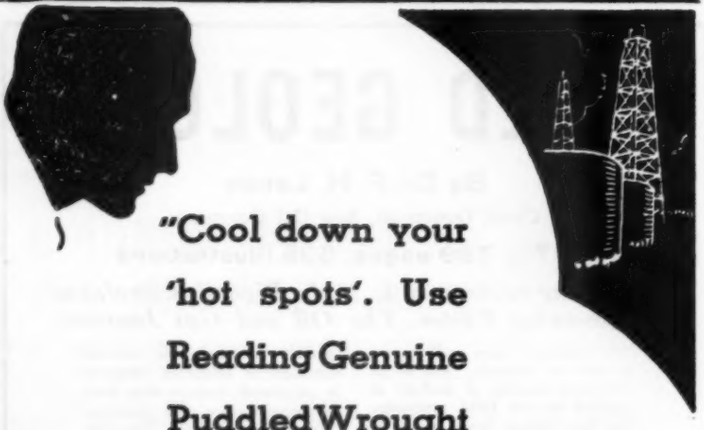

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from E line, 55 ft. from S line of Blk. 34, Por. 45.
Re-working 4,115 ft.

E. H. East's No. 1 Scarbrough, 150 ft. from S line, 1,150 ft. from E line of Blk. 14, East Retema Subd., Tule Grant.
Rigging up.

Maddox & Walter's No. 1 John H. Shary, 308 ft. from SE line, 440 ft. from SW line of Blk. 21, Porcion 58.
Drlg. 4,659 ft.

Madox Turnbull & Irwin's No. 1 J. H. Sharp, 320 ft. N and E lines of Tract 21, Porcion 59.
2,090 ft., no report.

Mundy & Son's No. 1 Guerra, 853 ft. from W line, 1,275 ft. from N line of Tract 12, Porcion 41.
Moving in material.

Nedler & Graham's No. 1 Oscar Daskom, center of Blk. 42, Porcion 45.
Derrick wrecked; location.

Jim Hogg County

Miller & Pippin's No. 1 Yeager, 527 ft. S line, 150 ft. E line of Blk. 6, Sur. 20.
Fishing 3,630 ft.

A. W. Phillips' No. 1 Allen, 660 ft. from S and E lines of Blk. 293, Pippin Subd. of the Randado grant.
Set csg.; W.O.C. 42 ft.

Jim Wells County

Sunray Oil Co.'s (A. M. Hagan) No. 1 Robert Adams, 330 ft. N and E of SW cor. Sec. 10, M. Ruiz Sur.
Drlg. 2,975 ft.

Karnes County

Marts Pet. Co.'s (Harris & Jecker) No. 1 Cochran, 150 ft. from S line, 360 ft. from E line, McConnel League.
Sanded 4' S.D.

Marzo Oil Co.'s No. 1 Thane, 330 ft. from S & E lines of W half of N 160-ac. of 280-ac. tract in F. Ruiz Sur.
Rig.

Harry Sample's No. 1 Seeger, 330 ft. from W line, 330 ft. SW of road, J. Pointevent Sur.
S.D. 3,008 ft.

R. G. Tonkin's No. 2 Henke, 3,670 ft. from SW cor., 330 ft. from W line (location changed).
Location.

Kendall County

J. C. Freeman's No. 1 J. M. Gerffers, 1,200 ft. out of SW cor. of 11½-ac. tract, Mara Hodgson Sur., Sec. 796.
Standing 102 ft.

Kerr County

Emerald Oil Co.'s (Meteor Oil Co.) (Edminton & Walker) No. 1 Whitworth, 1,160 ft. from S line and 1,333 ft. from E line of Sec. 1,429 of the H.E.W.T. Sur.
S.D. in lime 800 ft.

G. F. Schreiner et al's No. 3 Jeff Love, 1,500 ft. SE of No. 1 and 1,530 ft. from SE cor. and 300 ft. from N line of Sec. 1,591.
T.D. 5,625 ft.; porous lime; S.W. 5,622-25 ft.; S.D.

Kleberg County

Harry Clark's No. 1 Rodgers, Lot 5, Blk. 36.
S.D. 750 ft.

Parr & Ponder's No. 1 Sam Michalk et al, 330 ft. from N line and 775 ft. from S line, Blk. 37, Sec. 5; 5 miles SE Kingsville.
T.D. 1,983 ft.; S.D.

LaSalle County

Joe Danciger (Killingsworth Oil Co.'s) No. 1 Yeager, Sur. 94, 100 ft. from W line, 300 ft. from N line of Sec. 94, Blk. 5, Lot 10.
T.D. 2,012 ft.; cemented 7⅝-in. csg. at 1,766 ft.; perforated 1,700-20 ft.; tested fresh water; recemented and perforated at 1,500-20 ft.; tested sulphur water; S.D.

Lee County

McNeill Pet. Co.'s No. 1 Beatty, 3,700 ft. from SW line, 4,200 ft. from SE Line, Wm. Nichols Sur.
T.D. 2,367 ft.; Edwards lime, 5 3/16-in. csg. at 2,306 ft.; fishing swab.

Scharbach & Stoes No. 1 Robert Otto.
T.D. 2,450 ft.; S.D.

Live Oak County

Mills Bennett Prod. Co.'s No. 1 Watson et al, 3,653 ft. NE cor. of L. D. Camp tract, then 950 ft. N line of tract, Pablo Salinas Sur.
Drlg. 3,557 ft.

Earl Calloway's No. 1 George West hrs., Sec. 255, B.S.&F. Sur.
Set surface csg. 200 ft.; W.O.C.

Henderson Coquat's No. 1 Reagan, McGloin Sur., E of Nueces River and S of Oakville.
No report.

Gem Oil Co.'s No. 1 J. E. Lyne, (3,700 ft. from Devonian-Penn's No. 1 Lyne, dry hole) M. M. Lyne Sur., B.B.&M. Grant, Sec. 134, A-178.
Abandoned 3,571 ft.

Ray Nixon's No. 1 Chamberlain, 150 ft. from E line, 950 ft. from N line of Sec. 174, William Hill Sur.
T.D. 2,250 ft.; abd.

McMullen County

Bussa Oil Co.'s No. 1 F. B. Horton, center of E½ of NW¼ of S 640-ac. of J. M. Jean Sur. No. 29.
No report.

John O. Gibson's No. 1 Mazur & McDowell, 330 ft. from N and W lines, Sec. 19, Blk. 4, H.T.&B. Sur.
Coring 1,645 ft.

J. O. Gibson's No. 1 G. C. West (Lowe), 150 ft. E line, 1,200 ft. S of NW cor. of Lot 1, Blk. 4, H.T.&B. Sur.
S.D. 465 ft.

Howard & Carpenter's No. 1 Jungman, 1,030 ft. from E line, 950 ft. from S line, Hely Sur.
Drlg. 1,208 ft.

Chas. A. Hall's No. 1 B. C. Claunch, 368 ft. from N line, 160 ft. from E line of 25-ac. tract, Michael Haley Sur.
Location.

Points et al's No. 1 Fahler, 432 ft. S line, 819 ft. E line of tract, Byrna pasture.
T.D. 1,004 ft.; to perforate.

Medina County

Joe Dupree's No. 1 Batto, 258 ft. from E line, 957 ft. from N line, J. Ball Sur. No. 1 178.
T.D. 424 ft.; resuming operations, cleaning hole.

O. L. Gates and H. W. Hill, Jr.'s No. 1 Odom, 300 ft. from W line, 600 ft. from N line of H. Castro Sur. 174.
T.D. 396 ft.; abandoned.

Letro Oil Corp.'s No. 1 E. B. Forrest, 1,928 ft. from N line, 1,908 ft. from E line of 640-ac. tract, Blk. 69.
Drlg. 65 ft.

W. T. Shoemaker's No. 1 Noonan, 52.5 ft. S 2 deg. 20 ft. E of old well, Sec. 248, M. Simon Sur.
S.D. 700 ft.

Nueces County

N. M. Wilson's No. 1 J. C. Bluntzer, SE cor. of tract, Casa Blanco Grant.
Rig.

Real County

H. J. Heartwell et al's No. 2 Mrs. M. S. Perry, 250 varas from NW line, 775 varas from SW line of A.B.&M. Sur. No. 176.
Standing 3,150 ft.

San Patricio County

Masterson et al's (Tom Graham) No. 1 Wurzbach, 330 ft. from W line, 4,350 ft. from S line of C. C. Hornsby Sur.
Standing 5,851 ft.

Starr County

C. R. Borah's No. 1 A. Guerra, San Jose grant, 330 ft. from N and 150 ft. from E lines of Sec. 6 (NE part of county).
Fishing 3,517 ft.

Nix et al's No. 1 S.C.C.C., 150 ft. from S and W lines of Blk. 58, Jeffries Lambeth Subd.
Coring 2,145 ft.

Pedernal Oil Co.'s No. 1 Hicks et al, 187 ft. from NW line, 318 ft. from NE line of Blk. 6, Pedernal Grant.
2,200 ft.; no report.

Travis County

R. C. Hill's No. 1 S. A. Johnson, 1,473 ft. from SE line, 308 ft. from NE line of 80-ac. tract, John W. Haun Sur.
S.D. 842 ft.

W. F. Billingslea's No. 1 Lundgren Est., 330 ft. from NW line, 150 ft. NE of road, Blk. 17, Lemuel Kimbro League.
Drlg. 350 ft.

G. A. Artz & Co.'s No. 1 Rolff, 454 ft. N line, 207 ft. W of tract, Hancock Sur.
Drlg. shale 655 ft.

Swearingen & White's No. 1 Edwin Carlson, Hann Sur.
No report.

Webb County

Arthur H. Wray's No. 1 Geo. Stuempke, Share 1, Brewster pasture, Galan grant.
S.D. 1,125 ft.; moving in electric rig; To deepen.

Willacy County

W. T. Daniel's No. 2 Armendiaz, near Rio Hondo, 7,798 ft. from E and W lines of Share 14.
Standing 3,850 ft.

Kingwood Oil Co.'s No. 1 Santa Rosa, Inc., 160 ft. from E line, 637 ft. from S line of Sec. 30, Blk. 16, Share 44, San Juan de Carricitas grant.
Drlg. 4,633 ft.

Williamson County

Fuchs & Walter's No. 1 G. Allman, John Bevil Sur. No. 56, 150 ft. from SW line, 300 ft. most westerly SW line of 264-ac. tract.
Lost hole 875 ft.; will drill new hole.

Gebhart's No. 1 Lawrence, 450 ft. from S line, 400 ft. from E line of Lawrence Sur.
T.D. hard shale 2,080 ft. D.&A.

H. B. and Otto Glass' No. 1 Albert, 2 miles SE of Taylor.
Standing 40 ft.

H. L. Goff et al's No. 1 Albert Klotz, 1,700 ft. from N line, 150 ft. from E line of 100-ac. tract, W. Cartwright Sur.
S.D. 1,250 ft.

Hays et al's No. 1 Pfluger, 150 ft. from E line, 150 ft. from S line, White Sur.
S.D. 915 ft.

Kothmann et al's No. 1 Albert Krueger, John Bevil Sur. No. 56, 1,400 ft. from NW line, 1,050 ft. from SW line, 118-ac. tract
Drlg. shale 350 ft.

Rue et al's No. 1 Chas. Bachmayer, 6 miles SE Taylor.
T.D. 800 ft.; csg. parted; fishing.

Zapata County

F. H. Crow et al's No. 1 Daniel Yzaguirre, 330 ft. out of SW cor. Share 1, Porcion 14-15-16, D. Yzaguirre tract.
Drlg. 3,113 ft.

Joe Palmer's No. 1 Emma A. Markrud, 150 ft. from NE and NW lines, Blk. 22, Sur. No. 616.
Drlg. 800 ft.

Texas Royalty Investment Co.'s No. 1 N. J. Vela, 686 ft. from NE line, 300 ft. from NW line, Blk. 7, Por. 29.
S.D. 2,340 ft.

S. W. TEXAS PROVEN

Week Ending July 27

Carroll—Bastrop County

Nelson Puett's No. 5 Carroll Estate, 1,926 vrs. (5,350 ft.) from NW line and 619.20 vrs. (1,720 ft.) from SW line of Andrew Mayes Sur. No. 19.
T.D. 2,385 ft.; no report.

Fay Wilson et al's No. 1 Calahan, 7,700 ft. from NW line, 350 ft. from SW line, Mays Survey.
Rig, drlg. water well..

Bateman—Bastrop County

Batts & Jarnson's No. 1 Mrs. Annete Harris, 576 vrs. (1,600 ft.) NW line, 630 vrs. (1,750 ft.) SW line, John Maxmilian Sur. 22.
Standing 2,150 ft.

Caesar—Bee County

Luling Oil & Gas Co.'s No. 9-B Ruhman, 1,180 ft. from NW line, 150 ft. from SW line of Blk. 40, Hodge Sur.
Rig up.

Luling Oil & Gas Co.'s No. 4 Miller, N offset to Luling's No. 1 Hudmon.
Abandoned.

El Toro Oil Co.'s No. 1 J. J. Grisson, 150 ft. from N and W lines of 10-ac. tract, P. B. Early Sur.
Spudded; no report.

Rual Swiger's No. 6 Gardner, 150 ft. S and E lines of tract.
Sand 3,035-45 ft.; set csg.

Swiger et al's No. 4 Gardner, W offset to Vaughn producer.
Moving in material.

Dirks—Bee County

Dirks Bros.' No. 6 Harris, 150 ft. from NW line, 330 ft. from NE line of Lot 2, Harris Subd.
Sand 3,875-85 ft.; T.D. 3,885 ft.; set csg.; W.O.C.

L. A. Douglas' No. 1 Imogene Hall, 900 ft. from SE line, 330 ft. from SW line of 80 acres, T. J. Butler Sur.
Comp. sand 3,917-25 ft.; 100 bbls.; T.P. 100 lbs.

Mills Bennett Prod. Co.'s No. 1-C Harris, 330 ft. from SE and SW lines, J. L. Dugat Sur. No. A-1210.
Rigging up.

Heyser, Heard & Walton's No. 5 Young, 330 ft. from S line, 990 ft. from E line of C. A. Dugat Sur.
Comp. sand 3,865-3,908 ft.; 325 bbls. through ¼-in. choke; C.P. 600 lbs.

Heyser, Heard & Walton's No. 6 Young, 330 ft. from S line, 660 ft. due W of No. 5, C. A. Dugat Sur.
Sand 3,842-87 ft.; cemented csg.; W.O.C.

Heyser, Heard & Walton's No. 3 Young, 330 ft. from NE line, 700 ft. NW of No. 2, F. P. Rawlins Sur.
Comp. sand 3,833 ft.; 350 bbls. through ¼-in. choke; T.P. 400 lbs.; C.P. 700 lbs.

Heyser, Heard & Walton's No. 4 Young, 330 ft. from NE line, 700 ft. NW of No. 3, F. P. Rawlins Sur.
Sand 3,865-3,909 ft.; W.O.C.

Ray—Bee County

Dirks Bros.' No. 3 Ray, 660 ft. E of No. 2 and W road to Pettus in SW¼ of Sec. 7.
1,800 ft.; no report.

L. W. Littlejohn's No. 1 J. B. Borroum, 150 ft. out of SW cor. of 234-ac. tract, Wm. Gell Sur.
Standing 135 ft.

Magnolia Pet. Co.'s No. 2 Ray, 330 ft. from NE line, 150 ft. from E line of lease.
Drlg. shale 2,504 ft.

Tide Water Oil Co.'s No. 1 Ray, 330 ft. N and E lines of 80-ac. tract, Blanchard Sur.
Sand 3,920-40 ft.; set csg.

Worth Oil Co.'s No. 3 Rutledge, 150 ft. out of SW cor., 300 ft. S of No. 2, 15-ac. tract, A. Hadley Sur.
Location.

Tuleta—Bee County

Mills Bennett Prod. Co.'s No. 4-A C. W. Bassinger, 660 ft. S of No. 3-A, 660 ft. E of No. 2-A, 990 ft. out of NW cor. of Sec. 7, J. M. Uranga Grant.
Comp. 30 bbls. per hour, 3,869 ft.

Highland Oil Co.'s No. 3 Campbell, 330 ft. from SW line, 400 ft. SE of No. 1 W. B. Blanchard Sur.
Sand 3,944-51 ft.; drlg. plug.

Southwest Exploration Co.'s No. 1 Heyden & Bruckhan, C of farm tract, 330 ft. from N and W lines of Sec. 20, Uranga grant.
Rigging up.

Sun Oil Co.'s No. 1 Page, 330 ft. from SE and SW lines of 160-ac. tract, Nancy J. Young Sur. A-558.
M.I.M.

Texas Co.'s No. 2 Young, 330 ft. from S & E lines tract, Young Sur.
Rig.

Texas Co.'s No. 4 Young, 660 ft. E of No. 1, 330 ft. N of S line, George Young Sur.
Sand 3,950 ft.; cementing csg.

Texas Co.'s No. 2 Young, 330 ft. from S line, 682 ft. due W of No. 1, 379.95-ac. tract, Geo. Young Sur.
Comp sand 3,811-51 ft.; 800 bbls. through ¼-in. choke; T.P. 600 lbs.

Tide Water Oil Co.'s No. 2 Campbell.
Comp. 3,925 ft.; 15 bbls. per hr.; T.P. 200 lbs.; C.P. 700 lbs.

Pettus—Bee County

United Prod. Co.'s No. 51 Geo. A. Ray, 540 ft. from E line, 4,500 ft. to northern lease line, Geo. A. Kerr Sur.
Drlg. sand and shale 3,757 ft.

Dobrowolski—Bexar County

D. C. Pegg and B. Miller's No. 3 Katie Strunk, 450 ft. from NE line and 1,450 ft. from SE line, Katie Strunk 139.65-ac. tract, Juan Montez Sur.
Drlg. shale 585 ft.

Von Ormy—Bexar County

Joe H. Parker's No. 1 James McClosky, 1,500 ft. N line, 475 ft. W line, F. A. Desafire Sur. No. 134.
Standing 800 ft.

Richard Oil Co.'s No. 1 Karl Weilbacher.
Drlg. shale 685 ft.

Palo Blanco—Brooks County

United Prod. Co.'s No. 1 Kathleen Jones Hocker, 1,300 ft. SW of No. 2, 1,636 ft. from N line of Los Megneijes de Palo Blanco Grant.
Coring 2,503 ft.

Dale—Caldwell County

Adams & Lyles' No. 2 Moore, 300 ft. from NE line, 150 ft. from NW line, Jasper Gilbert Sur.
Comp.; pumping 8 bbls. daily.

Bruner—Caldwell County

Dawn Oil Corp.'s No. 2 Floyd Tiller.
Derrick.

Branyon—Caldwell County

R. S. Boling's No. 2 C. F. Robertson, 575 ft. along Plum Creek from SW cor. of tract, 150 ft. from creek, John Neill Sur.
Chalk 2,060 ft.

Dunlap—Caldwell County

Exploration Co.'s (F. Meyers) No. 1 W. T. Mooney, 310 ft. from S line, 450 ft. from W line of 95-ac. tract, S. Seale Sur.
2,190 ft.; S.D.

Ballard & Witting et al's No. 1 Mrs. A. C. Bridges et al, 650 ft. from NW line, 450 ft. from NE line of Soloman Seale Sur.
Standing 1,981 ft.

W. T. Walker's No. 3 Walker, 330 ft. SE of No. 2.
1,200 ft.; S.D.

Driscoll—Duval County

Continental Oil Co.'s No. 1-B Sevier Sur. No. 64, 660 ft. from S and E lines.
Drlg. shale 610 ft.

Government Wells Pool—Duval County

Magnolia Pet. Co.'s No. 49 Mag. Duval Ranch, Sec. 208, J. Poitevent Sur.
Comp. 100 bbls. daily, 2,329 ft.

Magnolia Pet. Co.'s No. 2 Herbst, 330 ft. from N and W lines, Sur. 70.
Sand 2,808 ft.; cemented csg.

Magnolia Pet. Co.'s No. 3 C. W. Hahl, 330 ft. out of SW cor. of 640-ac. tract, Sec. 67, C.C.S.D. and R.G.N.G. R.R. Co. Sur.
Comp. 17 bbls. per hr. through ⅝-in. choke.

Magnolia Pet Co.'s No. 3 Alice Loffler, 660 ft. N of No. 2, 330 ft. W of E line, Sec. 47, J. Poitevent Sur.
Comp.; sand 2,247-74 ft.; 20 bbls. per day.

Magnolia Pet. Co.'s No. 48 D.C.R.C., 1,650 ft. from N and E lines of Sec. 208, J. Poitevent Sur.
Comp. sand 2,326-50 ft.; 80 bbls. per day.

Magnolia Pet. Co.'s No. 15 J. O. Wilson, 330 ft. from N line, 660 ft. due E of No. 3, Sec. 134, C.B. & C.N. R.R. Sur.
Comp.; sand 2,365-2,425 ft.; 20 bbls. per day.

Buffalo Oil Co.'s No. 1 C. W. Hahl, 330 ft. out of SE cor. of SE¼ of NE¼ of Sec. 61, J. Poitevent Sur.
Sand 2,332-34 ft.; testing.

Parr Oil Corp.'s No. 3 R. L. Glover, 330 ft. from N and E lines of SE¼ of SE¼ of Sec. 44, J. Poitevent Sur.
Location.

Simpson-Fell Oil Co. et al's No. 8 L. B. Moody, 990 ft. from N line, 330 ft. from E line of 100-ac. tract, G.B.&C.N.G. Sur. No. 60.
Comp.; sand 2,366-76 ft.; T.D. 2,382 ft.; 15 bbls. per day.

Smith & Storey's No. 15 Lundell, 330 ft. from W line, hence N at right angle 330 ft., Sur. No. 48.
Drlg. 2,353 ft.

Loma Nova—Duval County

Birdwell Oil Co.'s No. 1 B.C.C., 330 ft. from N and E lines of the SW, SW, Sec. 76.
Rigging up.

Bridwell Oil Co.'s No. 1 Hubbard, 330 ft. out of NW cor. of 80-ac. tract, Sec. 71, B.S.&F. Sur.
Comp.; sand 2,708-28 ft.; 150 bbls.

Duval Oil Co.'s No. 1 Hubbard, Morris & Cummings Sur., Sec. 77, 330 ft. out of NE cor. NE¼ section.
Rigging up.

Frank Gravis' No. 1 Flodin, 330 ft. from S and E lines of Sur. 61.
No report.

Frank Grovis' No. 2 Byland, 330 ft. S and E lines, Blk. 2, Sur. 78.
Location.

Claude Hamil's No. 2 Ruiz, 330 ft. from S and E lines of NW 100-ac. tract, Sur. 41.
Drlg. shale 1,765ft.

Claude Hamil's No. 6 Hubbard, 330 ft. from W line, 3,630 ft. from S line of Sur. 77.
Sand 2,604-24 ft.; cemented csg. 2,604 ft.; W.O.C.

Henderson & Harvey's No. 1 Ruiz, 900 ft. from E line and 1,980 ft. from N line of Sur. 126.
Cored sand 2,647-53 ft.; cemented csg.

Highland Oil Co.'s No. 1 Hubbard, NW cor. of Sur. 72.
Completing at 2,682 ft.

Humble Oil & Refg. Co.'s No. 6 Ruiz, 330 ft. from W line and 914 ft. from S line of Sur. 553.
Comp.; sand 2,748-68 ft.; 10 bbls. per hr.

Lipscomb, Doubert et al's No. 1 Hubbard, 330 ft. from N and E lines of S½ of NE¼ of Sur. 75.
Sand 2,644-56 ft.; cemented csg.; W.O.C.

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Comp. 150 bbls. daily, 2,709 ft.

Rosen Oil Co.'s No. 3 Hubbard, 330 ft. from W line, 990 ft. from N line of SW¼ of Sur. 84.
Sand 2,765-75 ft.; comp.; no gauge.

Shell Pet. Corp.'s No. 2 Hubbard, 660 ft. due N of No. 1, 330 ft. from E line of 320-ac. tract, Sec. 77.
T.D. 2,797 ft.; cemented csg.

Stieren Oil Co.'s No. 3 Wright, Sur. 72.
T.D. 2,714 ft.; I.P. 86 bbls. per day.

Texas Co.'s No. 1 Wendt, 330 ft. from N and E lines of V. R. Guffey Sur.
Completed 21 bbls. per hour; sand 2,635-53 ft.

Seven Sisters—Duval County

Humble Oil & Refg. Co.'s No. 2-A Serna Jr. et al, 660 ft. W of No. 1-A, 330 ft. N of S line, 1,650 ft. E of W line of Sec. 384, B.S.&F. Sur.
Set surface csg.

Santa Clara Oil Co.'s No. 5 Wood-Welder, 660 ft. from N line, 330 ft. from E line of 160-ac. tract, Sec. 385, J. Poitevent Sur.
T.D. 2,496 ft.; set csg. 2,485 ft.; W.O.C.

Pearsall—Frio County

Amerada Pet. Corp.'s No. 1 Kothman, 500 ft. from N and W lines of B. L. Crouch Sur.
T.D. 3,963 ft.; cemented bottom of hole; tested salt water 3,959 ft.; drlg. shale 4,321 ft.

Amerada Pet. Corp.'s No. 1 D. F. Smith et al, 4,500 ft. from NE line, 1,650 ft. from SE line, Joseph V. Mason Sur. No. 322
T.D. 6,085 ft.; cemented 7-in. csg. on bottom; drlg. plug.

Darst Creek—Guadalupe County

Texas Co.'s No. 2 Posey (workover).
Old T.D. 2,606 ft.; set 7-in. csg. at 2,575 ft.; T.D. of sidetracked hole 2,583 ft.

Dinero—Live Oak County

J. O. Whittington's No. 2 Henrietta C. Little, 2,640 ft. from SW line, 1,950 ft. from SE line, M. M. Shipp Sur.
Drlg. 3,778 ft.

Lucas—Live Oak County

Houston Oil Co.'s No. 32 Cartwright, 1,124 ft. N of No. 31, Trudo Sur.
S.D. 6,787 ft.; P.B. 5,304 ft.; set csg.

McNeill—Live Oak County

Lion Oil Refg. Co.'s No. 8 McNeill, 330 ft. from NE line, 1,103 ft. from SE line of Blk. 9, Jane Curry Sur.
T.D. 4,381 ft.; I.P. 150 bbls. per day.

Three Rivers—Live Oak County

Benco Oil Corp.'s No. 1 E. Mahoney, 155 ft. from NW line of J. H. Harvey tract, 3,109 ft. SW of highway in Mark Killelly Sur.
S.D. 78 ft.

Turner & Walker's No. 1 C. F. Simmons, 50 ft. from N line, 300 ft. from W line, Farm Tract 513, Blk. 12, S. Hayes Sur.
T.D. 325 ft.; abandoned; skidding derrick 50 ft. for second hole.

Sam Fordyce—Hidalgo County

Cortez Oil Co.'s No. 2-C Smith, 230 ft. from N line, 690 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.

Cortez Oil Co.'s No. 3-C Smith, 230 ft. from N line, 1,150 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.

Cortez Oil Co.'s No. 1-C Smith, 230 ft. from N and W lines of NE 40 acres of Tract B-3, Porcion 41.
T.D. 2,945 ft.; S.D.

Harrison & D. D. Oil Co.'s No. 3 Lula George, NW cor. of SW 20-ac. of tract 13, Porcion 41.
T.D. 800 ft.; S.D. because of blow out on No. 3 Guerra.

Harrison, Davis & Bishop's No. 3 Guerra, 230 ft. from S line, 690 ft. from E line of 40-ac. tract, Tract 12, Porcion 41.
Sand 2,742-53 ft.; blew out; gas showing oil; derrick wrecked; flowing wild.

Henshaw et al's No. 1 Smith, Tract 3-B, Porcion 41.
Drlg. 2,104 ft.

Kingwood Oil Co.'s No. 6 Guerra, 150 ft. from S line, 640 ft. from W line, SW 20-ac. tract, 256 Porcion 39.
Rigging up.

Kingwood Oil Co.'s No. 4 J. Lawrence, 200 ft. from N line, 150 ft. from W line of W 40-ac. tract 274, Porcion 39.
Drlg. 2,550 ft.

Lacy's No. 1 Seabury, 230 ft. from S line, 530 ft. from W line of 6.25-ac. tract, Tract 256, Porcion 38.
Drlg. 2,655 ft.

H. J. Porter's No. 2 C. E. Smith, N end of 8½ of tract in Tract 278, Porcion 40.
Spudded; S.D.

E. Powell's No. 1 Lula George, SW cor. of NW 20-ac. Tract 13, Porcion 41.
Rig.

Windsor Oil Co.'s No. 3 Doss, 630 ft. from N line, 150 ft. from W line of 55-ac. tract No. 278, Porcion 40.
Drlg. 1,676 ft.

Mercedes—Hidalgo County

Union Sulphur Co.'s No. 4 A.R.G.L.&I.C., 400 ft. N and W lines, Lot 1, Blk. 99, 1⅛ miles SW discovery well.
Drlg. 4,703 ft.

Union Sulphur Co.'s No. 1 American Rio Grande L. & I. Co., 400 ft. S and W of NE cor. of Lot 329, Blk. 59 (W.O.).
Drlg. 6,840 ft.

Union Sulphur Co.'s No. 2 American Rio Grande L. & I. Co., 400 ft. S and E lines of tract, Blk. 36, Capisallo district (W.O.).
T.D. 3,044 ft.; drill stem stuck 6,300 ft.; abandoned.

Sandia—Jim Wells County

Magnolia Pet. Co.'s No. 6 Seeligson, 600 ft. W, 330 ft. S of No. 3 Canales Sur. No. 20.
T.D. 7,135 ft.; fishing.

O. W. Killam's No. 7 Wade, 1,320 ft. SE of No. 4, 200 ft. from NW line, 225 ft. from NE line, Lot 1, Blk. C, Lopez de Jean grant.
T.D. 5,170 ft.; S.D.

Welner—Kendall County

Southwestern Dev. Co. Synd., Ltd.'s No. 1 W. G. Werner, 1,645 ft. from N line, 765 ft. from NW line of 320-ac. tract, J. F. Torrey Sur. No. 781.
675 ft., underreaming.

Kingsville—Kleberg County

Ray Clark's No. 1 House, Lot 5, Blk. 37, K.T.&I. Co. Sur.
S.D. 1,000 ft.

Fidelity Exploration's No. 1 Paul O. Henry, 150 ft. from N line midway E and W lines of Blk. 2, Sec. 49, K.T.&I. Sur.
2,600 ft., no report.

Fidelity Exploration Synd.'s No. 1 Vivian Kivlin, Sec. 4, Blk. 39, K.T.&I. Sur. on Vivian Kivlin lease.
Derrick blown down.

Jacob Pool—McMullen County

Lcma Oil Co.'s No. 5-W Jacob, 2,207 ft. from E line, 13 ft. from N line of Jacob Sur. No. 10.
Drlg. 1,353 ft.

M. E. Young's No. 8-A Cox, E of Frio River across line from Lark tract in M. Holy Sur. (old well).
Sand 1,070 ft.; no report.

Loma Alta—McMullen County

Illinois Pet. Co.'s No. 2-A Ellen Atkinson, 330 ft. from S line, 660 ft. due E of No. 1-A, Sec. 13, Martha J. Deen Sur.
Abandoned 2,498 ft.

Loma Oil Co.'s No. 1 Hagist, NE cor. of NW¼ of Sur. 108.
Sand 2,190-92 ft.; 2,215 ft., no report.

Taylor—Medina County

Callahan & Robert's No. 1 Ray Taylor, 1,450 ft. NS line, 220 ft. EW line, Sur. No. 135.
Spudded; S.D.

Plymouth-San Patricio County

Benson & Jones' No. 1 Welder, 2,333 ft. from S line, 466 ft. from E line of Sec. 38.
Coring 4,642 ft.

Heep Oil Corp.'s No. 4-E Welder, 466 ft. from N line, 1,399 ft. from E line of N 400-ac. tract, Sec. 46, R. Montgomery Sur.
Rigging up.

Heep Oil Corp.'s No. 3-E Welder, 466 ft. from E line, 933 ft. due S of No. 2-E, N 400 acres of Sec. 46, R. Montgomery Sur.
Comp.; T.D. 5,659 ft.; no gauge; C.P. & T.P. 1,800 lbs.

Heep Oil Corp.'s No. 2-E Welder, 466 ft. from E line, 1,399 ft. from N line, 933 ft. due S of No. 1-E, N 400-ac. of Sec. 46, R. Montgomery Sur.
T.D. 5,667 ft.; recemented bottom hole.

Magnolia Pet. Co.'s No. 1 Corpus Christi Bank, 330 ft. E from river, thence 330 ft. at R/A, 9,300 ft. SW of Heep's No. 1 Welder, H. H. Hunter Sur.
Comp.; 120 bbls.; T.P. 1,850 lbs.; C.P. 2,250 lbs.

Plymouth Oil Co.'s No. 10-C Welder, 1,500 ft. from W line, 266 ft. from N line, Sec. 48.
Building derrick.

Plymouth Oil Co.'s No. 8-C Welder, 933 ft. E of No. 5-C and 933 ft. N of No. 4-C.
Drlg. plug 5,613 ft.

Plymouth's No. 6-C Welder, 933 ft. S of No. 4-C.
Comp.; T.D. 5,638 ft.; estimated 25 bbls. per hour through 3/16-in. choke; T.P. 550 lbs.; C.P. 375 lbs.

Plymouth Oil Co.'s No. 7-C Welder, 933 ft. W of No. 5-C.
5,638 ft.; swabbing.

Plymouth Oil Co.'s No. 1-D E. H. Welder, 466 ft. from N line, 466 ft. SE of Ry., Sec. 1, Subd. No. 1, E. H. Welder ranch.
T.D. 6,680 ft.; P.B. to 5,925 ft.

Violet Oil Co.'s No. 1 Welder, 1,399 ft. from W line, 466 ft. from N line of 200-ac. tract, Sec. 47, Isaac Clover Sur.
D.&A. 6,008 ft.

Los Olmos—Starr County

H. C. Horter, Trustee, No. 1 Sanchez, 150 ft. from N and W lines Blk 3, Share 74, Porcion 72.
Sand 501-05 ft.; recemented bottom.

Ed Linberg's No. 7 Bass, 1,500 ft. from W line, 1,675 ft. from N line of Share 6, Porcion 75.
S.D. 500 ft.

Placetas—Starr County

Hughston Oil Co.'s No. 1-A Gregg-Wood, S end of Por. 84; replacement well, 990 ft. S of State Highway No. 4.
3,370 ft.; S.D.

Rio Grande—Starr County

Hiram Reed's No. 5 D.&C., 475 ft. from E line, 185 ft. from N line of Blk. 6, Tract 21, Porcion 80.
M.I.M.

W. W. Zimmerman's No. 2 D.&C., 1,122 ft. W, 150 ft. from S line of Blk. 1, Tract A-77, Porcion 81.
Location.

Saxet—Nueces County

Houston Oil Co.'s No. 4 Morgan, 660 ft.

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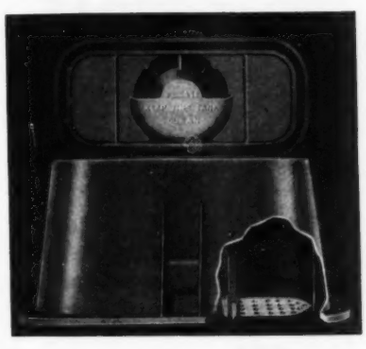

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E of No. 3, Sec. 7, Range 5. Location.

Houston Oil Co.'s No. 4 Walton, 330 ft. EW line, 1,560 ft. NS line. Drlg. shale and lime 2,933 ft.; no report.

Lucy Pet. Co. & Texon Royalty's No. 1 Isensee, 400 ft. from W line Midway N and S lines Sec. 6, Blk. 3, Sur. 316. Comp.; T.D. 4,857 ft.; 500 bbls. per day through ¼-in. choke; T.P. 300 lbs.; C.P. 725 lbs.

Magnolia Pet. Co.'s No. 2 W. W. Walton, 330 ft. from E line, 289 ft. from S line of 92.11-ac. tract, Enrique Villareal Sur. Location.

Southern Minerals' No. 1-A Rand Morgan, Roberts Sur. T.D. 7,195 ft.; abandoned.

Bruni—Webb County

Associated Oil Co.'s No. 7 Bruni, 330 ft. from NW line, 660 ft. NE of No. 5, Blk. 7, M. Arispe grant. Location.

Highland Oil Co.'s No. 8 Bruni, 1,650 ft. from NW line, 330 ft. from NE line, Sur. 7. Coring 3,407 ft.; had sand 3,387-94 ft.; no report.

Highland Oil Co.'s No. 12 A. M. Bruni Estate, 520 ft. E of No. 6, 330 ft. from S line of 200-ac. tract, M. Arispe grant. Location.

Mims Bros.'s No. 1 S. Benavides, 313 ft. from NE line, 347 ft. from SE line of Myrtle E. Hale Subd., Blk. 235, M. Arispe grant. Sand 2,785-92 ft.; comp.; 10 bbls. per hour.

Laurel—Webb County

South Texas Oil Co.'s No. 1-A, Sec. 269, Blk. 2, C.C.S.D. & R.G.N.G. Sur. Drlg. 460 ft.

South Texas Oil Co.'s No. 1 Laurel Bros., 100 ft. from E line, 200 ft. from S line of Sec. 269, Blk. 2, C.C.S.D.&R.G.N.G. Sur. Abandoned 1,045 ft.

West Cole Pool—Webb County

Allison et al's No. 1 Moses Jones, 330 ft. S and E lines of NE 100 acres, Sur. 1,640. Abandoned 917 ft.

Ross Barnhart's No. 1 de la Garza, 1,500 ft. from N line, 200 ft. from E line of Sur. 262. Standing 2,483 ft.; lost drill collar and bit.

Magnolia Pet. Co.'s No. 4 Volpe-Benevides, 1,948 ft. from E line, 200 ft. from S line of Sur. 660. Sand 2,342-45 ft.; testing.

Magnolia Pet. Co.'s No. 4 Magnolia-Benavides, 200 ft. from N line, 460 ft. due W of No. 3. Sur. 697. T.D. 2,341 ft.; comp.; 30 bbls. daily.

Magnolia Pet. Co.'s No. 3-G Benavides, Blk. 256, 347 ft. from NW line, 313 ft. from SW line, Arispe grant. Comp.; 10 bbls. per hour, 3,758 ft.

James P. Nash's No. 1 Benevides, 347 ft. from NW line, 313 ft. from SW line, Blk. 154, Arispe Grant. Drlg. 510 ft.

Frank Smith's No. 1 Moses Jones, 2,150 ft. E line, 2,850 ft. S line, Sur. 1,640. T.D. 851 ft.; abandoned.

Texas Co.'s No. 1 S Benavides, Blk. 257, 347 ft. from NW line, 313 ft. from SW line. Drlg. 256 ft.

Lopez—Webb County

Mills Bennett's No. 3 Lopez, 600 ft. N of No. 2, 2,310 ft. from W line, 2,124 ft. from N line of Sur. 73. Drlg. shale 2,675 ft.

Noack—Williamson County

Coffield & Lanning's No. 3 Heap, 200 ft. from N line, 225 ft. from W line of tract in White Sur. Location.

G. G. Mortimor's No. 1 Lopez, 1,333 ft. from S line, 2,310 ft. from W line, Share 16, Sur. 73. Drlg. 800 ft.

R. R. Ogden's No. 1 Matteck, 150 ft. N and W lines of 108.5-ac. tract in White Sur. Location.

W. L. Stephens' No. 1 J. P. Carlson, 200 ft. out of NW cor., 900 ft. SE line, 610 ft. SW line of Samuel C. Jones Sur. Drill stem stuck 945 ft.

Byersville—Williamson County

Taylor Ref. Co.'s No. 9-A Sladek, H. White Sur., 150 ft. from NE line, 1,200 ft. SE line (creek). Shale 700 ft.; S.D.

Charco Redondo—Zapata County

H. C. Dean's No. 1 J. N. G. Martinez, 330 ft. from NE and NW lines Blk. 34, Share 8. T.D. 100 ft.; abandoned.

Schimmel et al's No. 1 Martinez, 330 ft. from SE line and 847 ft. from NE line, Blk. 125, Share 1, Grullo Grant. 2,013 ft.; S.D.

Escobas—Zapata County

G. E. Glasco's No. 1 Haynes, 200 ft. NW and SW lines Blk. 7, Haynes Subd., Comitas & Villa Grants. Rig.

Reliable Oil Corp.'s No. 3 Alice Haynes, 500 ft. from SE and SW lines of Blk. 4, Comitas and Villa grants. 827 ft.; comp. 15 bbls.

Jennings—Zapata County

Texas Co.'s No. 72 Whitehead, 20,305 ft. from SW line, 7,945 ft. from SE line, Cerrito Blanco grant. Sand 1,207-12 ft.; csg. 1,205 ft.; pumping 15 bbls. daily.

Lopena—Zapata County

Gem Oil Co.'s No. 1 Ramirez, 330 ft. from NW and SW lines of Share 13, Por. 17. T.D. 6,502 ft.; plugged back to 2,132-52 ft.; comp.; 10,000,000 ft. gas.

Humble Oil & Refg. Co.'s No. 1 Dominguez, 12,785 ft. from NE line, 1,320 ft. from SE line of Porcion 31. Drlg. 2,260 ft.

J. J. O'Hern's No. 1 Alexander, 3,000 ft. from SW line of Share 7 and 550 ft. from SE line of Porcion 22. Sand 2,306-26 ft.; comp.; 15,000,000 ft. gas.

Trowel et al's No. 1 W. Z. Guerra. Coring brittle shale 1,790 ft.; no report.

Mirando Valley—Zapata County

C. L. Smith's No. 1 Robert Hinnant, 330 ft. out of NW cor. Sec. 307, Blk. 27, F. M. Makeig Sur. T.D. 2,505 ft.; swabbing.

E. C. TEXAS WILDCATS

Week Ending July 27

Wildcats—Anderson County

Hunt and Sun Oil Co.'s No. 2 Alice Scott, 30 ft. N of No. 1, James Crawford Sur. S.D. 1,153 ft.

J. W. Luttes' No. 1 C. McKee, 2,640 ft. from N line of lease and survey and 330 ft. from W line of McKey 800-ac. tract. Elev. 391 ft.; S.D. 4,516 ft.

Camp Hill Area

Gulf Prod. Co.'s No. 2-A Southern Lbr. Co., 330 ft. W along N line of 115.9-ac. tract from SE cor. of L. B. Ross' 37.6-ac. tract, and 330 ft. S at R/A, south offset to No. 1 Ross. Elev. 655 ft.; base Pecan 4,270 ft.; drlg. 4,763 ft.

Gulf Prod. Co.'s No. 3-A Southern Lbr. Co., 330 ft. N along W line of 115.9-ac. tract from SE cor. of D. A. Maddox 106-ac. tract, and 330 ft. E at R/A, east offset to No. 1 Maddox. Elev. 598 ft.; top Pecan 3,940 ft.; drlg. 4,250 ft.

Tide Water Oil Co.'s No. 1 Valentine, 2,554 ft. S of most easterly NE cor. and 467 ft. from E line of 30-ac. tract, John Little Sur. T.D. 5,282 ft.; P.B. 3,000 ft.; coring 5,170 ft.

Cayuga Area—Anderson County

Tide Water Oil Co. et al's No. 21-A Wells, 4,079 ft. N and 2,333 ft. W of lease, S. Edmondson Sur. (Trinity test). T.D. 8,925 ft.; temperature bottom hole reported 225 degrees; to set csg.

Long Lake Area—Anderson County

Tide Water Oil Co. et al's No. 1 Shaw and Cern, 1,400 ft. from S and 2,333 ft. from E line, in D. Parker Sur. Running csg.; T.D. 5,377 ft.; P.B. 5,345 ft. to complete as gas well.

Bowie County

Tex-Ark. Oil Co.'s No. 1 Hamilton Estate, 600 ft. E and 350 ft. N lines, J. Milan Sur., 4 miles S of Red River. S.D. 1,121 ft.

Woodley & Bentley's No. 1 Lumpkin, 330 ft. out of NE cor. of 245-ac. tract, J. McDermot Sur., 1 mile SW of Dalby Springs. Moving in material.

Cherokee County

O'Connor and St. Germaine Oil Co.'s No. 1 Long, 150 ft. E and 450 ft. E. G. S. Long Sur., 2 miles S of Mount Selman. Elev. 668 ft.; Pecan gap, 3,605-975 ft.; drlg. 4,100 ft.

Shell Pet. Corp.'s No. 1 New Birmingham Dev. Co., 190 ft. S and 150 ft. E from SE cor. T. J. Wood 160-ac. lease Levi Jordan Sur. Coring 5,185 ft.

S. Thompson's No. 1 G. H. Allen, 330 ft. out of SW cor. 150-ac. tract, Wm. King Sur., 3 miles S of Hughes Spring. Location.

Wilson Stubbs Oil Co.'s No. 1 Rowborts, 450 ft. from S line, 150 ft. from W line of 100-ac. tract, 2 miles SW of Jacksonville, J. D. Wolfin Sur. S.D. 1,553 ft.

Fannin County

B. F. Allen's No. 1-B Argo, center of 16½-ac. tract in J. G. Swisher Sur., 1 mile S of Ector. S.D. 405 ft.

Warner Moore et al's No. 1 Hancock, 400 ft. from W and 150 ft. N lines, Sec. 16, L. M. Baldock Sur., ½ mile S of Trenton. S.D. 170 ft.

Freestone County

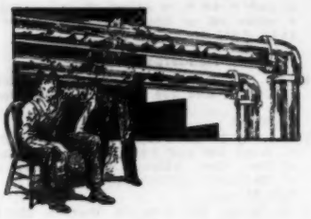
Hoover et al's No. 1 McFall, 150 ft. S and W lines, S. Garrison Sur., E of Mexia. Derrick.

J. E. Milburn's No. 1 S. E. McShan, 4,000 ft. NW and 5,000 ft. NE of tract, 3 miles SE of Donie, G. Dias Sur. S.D. 270 ft.

Gregg County

O. T. Clark's No. 1 Williams, 2,100 ft. from S and 2,400 ft. from W of D. Hill Sur., 3 miles NE of Longview. S.D. 3,710 ft.

L. P. Kean's No. 1 S. M. Smith, 1,000 ft.



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CHICAGO, ILLINOIS

E and 1,250 ft. S of W. W. Avery Sur., 4 miles SE of Gladewater.
Drlg. 1,025 ft.

Henderson County

Kirby Pet. Co.'s No. 1 C. L. Litchfield, 400 ft. N and 350 ft. W, I. Clendennen Sur.
Location.

Taubert & McKee's No. 2 M.T. Todd, 2,750 ft. from NE and 3,970 ft. from SE lines of Sur., Geo. Aldrich Sur., 2 miles SE of Malakoff.
S.D. 165 ft.

J. K. Wells' No. 1 W. E. Warren, 330 ft. out of NE cor. of Thos. Hanna Sur., 4 miles W of LaRue.
Material.

H. M. Wilson's No. 1 fee, 970 varas S of NE cor. of 943-ac. tract, 5 miles N of Malakoff.
Derrick.

Worsham's No. 3 Wathen, 315 ft. N and 467 ft. E of 80-ac. lease, T. J. Lindsey Sur.
Elev. 327 ft.; Austin chalk 3,230 ft.; drlg. 3,240 ft.

Hopkins County

D. A. Hale et al's No. 1 L. M. Hall, 200 ft. from N and E lines of 70-ac. tract, 1 mile SE of Miller Bros. A. Caro Sur.
S.D. 2,950 ft.; C.O.

Hunt County

Long & Wolfe et al's No. 1 A. L. Chapman, 375 varas from N and 2,060 ft. from W line of Enos Murphy Sur., 6 miles W of Greenville.
Location.

J. F. Morrissey & Co., Inc.'s No. 1 Fry, 643 ft. from N and 200 ft. from E of 146-ac. tract, 7 miles N of Commerce, C. Davis Sur.
Top Georgetown 3,013 ft.; elev. 562 ft.; S.D. for test.

Kaufman County

Germany et al's No. 1 Clark, 951 ft. N and 1,000 ft. W of tract, S. Eden Sur.
T.D. 1,780 ft.

Murry & Emerson's No. 1 G. W. Martin, 1,660 ft. from W and 250 ft. from N of 146-ac. tract, from W. L. C. Butler Sur., 2 miles NE of Kemp.
S.D. 1,784 ft.

Lamar County

Gulf Petroleum Co.'s No. 1 A. L. Darnell, 1,490 varas from S and 1,080 varas from W line of H. L. Williams Sur., 4 miles NE of Paris.
Drlg. 30 ft.

Leon County

Killough & Tucker's No. 1 G. W. Lee, center of NE 10 acres of 230-ac. tract, J. Burleson Sur.
S.D. 5,641 ft.

Tide Water Oil Co. et al's No. 1 G. W. Burkett, 1,435 feet from SE and SW lines of S. Sanches Sur. No. 7.
Location.

Limestone County

J. Edward Mills' No. 1 Hunt, 200 ft. from N. 350 ft. from W line 34.75-ac. tract, Israel Wood Sur., 3 miles NE of Kosse.
Coring 3,775 ft.

Doughtry et al's No. 1 S. Welch, 150 ft. from NW and 900 ft. from NE of 77.64-acre tract in A. Varilia Sur., 4 miles W of Groesbeck.
S.D. 3,121 ft.

J. P. McKinney et al's No. 1 N. B. Boyd, 300 ft. NE of Magnolia's No. 24 Sarah McAnulty Sur.
S.D. 1,633 ft.

Y. Rogers' No. 1 J. M. Tidwell, 330 ft. from S and E of 230-ac. tract, P. Varella Sur., 3 miles SW of Mexia.
Fsg. 3,039 ft.

McLennan County

T. Cunningham's No. 1 M. G. McKee, 940 ft. from S and 2,640 ft. W of 640-ac. tract, M. Snell Survey, near Bruceville.
Location.

Nacogdoches County

Morrow et al's No. 1 Mrs. J. J. Holton, 900 ft. from W and 1,200 ft. from S 50-ac. tract, B. Flores Sur., 5 miles E of Nacogdoches.
S.D. 915 ft.

Navarro County

W. J. Keeling et al's No. 1 J. F. Rushing 484 ft. from N line and 150 ft. from W line of 184-ac. tract, 6 miles SW of Richardson, Henry Ford Sur.
T.D. 2,895 ft.; to core.

McCullough et al's No. 1 C. Berry, 330 ft. from SE cor. of 35-ac. tract, 1 mile W of Dawson, William Moss Sur.
S.D. 1,460 ft.

Wiggins et al's No. 1 Donoho, 450 ft. from N and 1,101 ft. from E lines in John Coupie Sur., SW of Corsicana.
S.D. 1,439 ft.

Rains County

Allen & McClung's No. 1 Giles, T. Cunningham Sur., Abst. 143, 330 ft. from W line and 200 ft. from N line of 105-ac. Giles tract, 5 mi. SW of Emory.
Derrick.

Allen & McClung's No. 1 Ida Bullard, N. Brantely Sur., 1,300 ft. from W line and 200 ft. from N line of 25-ac. tract, 2 mi. SW of Emory.
Derrick.

Red River County

Abercrombie et al's No. 2 Grant, 1,100 ft. N and 6,140 ft. W of P. D. Midkiff Sur., 8 miles NW of Clarksville.
Derrick.

Joiner's No. 1 D. Rust, C. C. Wilborn Sur., 234 ft. N and 254 ft. W of most southerly SE cor. of Sur., just south of Avery.
Moving in rig.

Spear et al's No. 1 W. L. Gibson, 450 ft. from S and 1,250 ft. from E line of Sur., 2 miles E of Bogota, W. L. Gipson Sur.
Drlg. 3,135 ft.

Rusk County

J. W. Shipman et al's No. 1 Citizens Natl. Bank, NE cor. of 125-ac. tract, J. J. Y'Barbo Sur., 4 miles NE of Henderson.
Elev. 432 ft.; S.D. 80 ft.

Smith County

W. R. Harrison's No. 1 Rushing, J. Herring Sur. (O.W.D.D.)
S.D. 4,230 ft.

Titus County

S. Rotondi's No. 1 Lillianstun, 1,200 ft. E from NW cor. of J. Bodt Sur. and 330 ft. N, but in W. H. Crawford Sur., 5 miles NE of Talco.
Elev. 301 ft.; derrick.

Upshur County

Tip De'Arman's No. 1 D. Averett, 330 ft. N and W of 69.5-ac. tract, J. B. Davenport Sur., 4 miles S of Gilmer.
Elev. 422 ft., base Austin 3,754 ft.; S.D. 4,560 ft.

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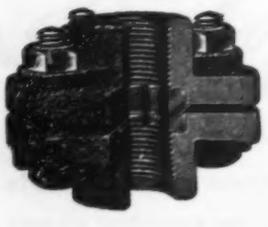

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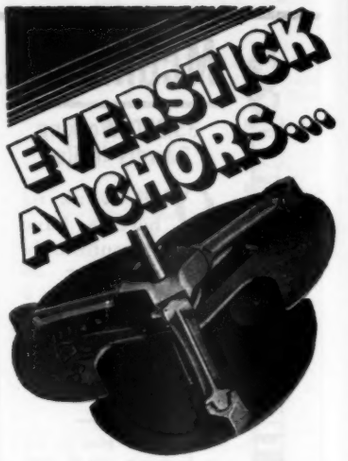

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Van Zandt County

J. Beren et al's No. 1 Bryant, 483 ft. N of same operator's dry hole, Nacogdoches County School Land Sur.
S.D. 1,335 ft.
Beren et al's No. 2 Palmer, 544 ft. from S and 686 ft. from E of 69.5-ac. tract, Nacogdoches County School Land.
S.D. 1,302 ft.

Wood County

Hollandsworth Drlg. Co.'s No. 1 Little Sandy Hunting & Fishing Club, 400 ft. from N and 3,500 ft. E of James Hamblin Sur., 12 miles SE of Mineola.
Drlg. 150 ft.
R. Wolfe et al's No. 1 C. M. Dickey, 660 ft. out of NE cor. of 100-ac. tract, E. Allen Sur., 5 mi. E of Winnsboro.
Top Austin 4,120 ft.; elev. 549 ft.; drlg. 4,560 ft.

WEST TEXAS WILDCATS

Week Ending July 27

Andrews County

Crafton Oil Co.'s No. 1 Richard & McWhorter, C NE ¼ Sec. 13, Blk. A-30, 6 mi. SE of NW cor. of county.
Elev. 3,441 ft.; top salt 1,800 ft.; drlg. 3,000 ft.
Fuhrman Pet. Corp.'s No. 2 Ford, 440 ft. from S and 1,320 ft. from E, Sec. 16, Blk. A-43.
T.D. 4,041 ft.; set whipstock at 3,994 ft.
Gulf Prod. Co.'s No. 1 J. S. Kelley, 1,320 ft. from S and E, Sec. 2, Blk. A-38.
Drlg. 1,705 ft.
Honolulu & Llano Oil Co.'s No. 1-B Parker, 440 ft. from N and 1,650 ft. from E, Sec. 11, Blk. A-42.
Elev. 3,281 ft.; T.D. 4,804 ft.; P.B. to 4,760 ft.; testing; shot with 200 qts. at 4,620-4,759 ft.; swbd. 110 bbls. per day.
Humble Oil & Ref. Co.'s No. 5 Means, 654 ft. from S and 677 ft. from W, Sec. 4, Blk. C-45, P.S.L. Sur.
Drlg. 2,854 ft.
Humble Oil & Ref. Co.'s No. 4 Means, 1,982 ft. from N and 660 ft. from E, Sec. 12, Blk. A-35.
Rigged up.
Republic Prod. Co.'s No. 1 Boner-State, 2,200 ft. from S and 1,320 ft. from E, Sec. 25, Blk. A-42.
T.D. 4,505 ft.; C.O.; flowed 100 bbls. per day before shot.
Shell Pet. Corp.'s No. 1 J. S. Means, 660 ft. from S and 1,980 ft. from E lines of Sec. 2, Blk. A-35, P.S.L. Sur.
Drlg. 2,353 ft.
L. G. Stogner et al's No. 1 Mrs. C. George, 660 ft. from S and E, Sec. 25, Blk. A-32, P.S.L. Sur.
Drlg. 840 ft.
Sun Oil Co.'s No. 1 J. S. Means, 1,980 ft. from S and 660 ft. from E lines of Sec. 8, Blk. A-35, P.S.L. Sur.
Location.
J. W. Trippiehorn's No. 1 Ogden, 330 ft. from S and 2,310 ft. from W lines of Sec. 6, Blk. A-46, P.S.L. Sur.
Elev. 3,211 ft.; drlg. 4,000 ft.
Wahlenmaier et al's No. 1 Cox Estate, 1,320 ft. from N and W of Sec. 8, Blk. A-33.
T.D. 157 ft.; to skid derrick.

Brewster County

F. C. Dodson's No. 1 Texas American Syndicate, 660 ft. from N and E, Sec. 66, Blk. 10, G.H.&S.A. Sur.
Elev. 3,228 ft.; drlg. 1,315 ft.
Joiner et al's No. 1 McIntyre, 353 ft. from S, 2,390 ft. from E of Sec. 21, Blk. 352, W. M. Mitchell Sur.
S.D. 2,150 ft.
King & Franklin's No. 1 Gage Est., C Sec. 138, Blk. 22, G.H.&S.A. Sur.
Elev. 4,344 ft.; S.D. 1,305 ft.
G. H. Storey's No. 1 Wilson, 1,980 ft. from N and E lines of Sec. 3, Blk. 212, T.&St. L. Sur.
Elev. 3,609 ft.; S.D. 1,875 ft.
S. G. Smith's No. 1 Decie, 2,490 ft. from S and E, Sec. 7, Blk. 1.
Elev. 4,271 ft.; drlg. 1,295 ft.

Cochran County

Kelsey's No. 1 Slaughter, C Labour 36, League 150, R.C.S. Lands.
Derrick.
West Texas Development Co.'s No. 1 Slaughter, near C of Labour 53, League 149, Randall Co. School Lands.
S.D. 100 ft.

Coke County

Haggerty et al's No. 1 Gaston, 340 ft. from S and 654 ft. from W, Sec. 11, Jos. Young Sur.
Drlg. 3,175 ft.

Concho County

Maverick Oil Co.'s No. 1 Jim Rice, 330 ft. from S and W lines of NW ¼ of Sec. 18, S.N. Ry. Sur.
Location.

Crane County

American Liberty Oil Co.'s No. 1 Tubbs, 796 ft. from S and 330 ft. from W, Sec. 11, Blk. B-27, P.S.L. Sur.
Elev. 2,536 ft.; drlg. 4,000 ft.
Dobbs Oil Co.'s No. 1 J. Cowden et al, 330 ft. from S and E of N half, Sec. 38, Blk. 1, H.&T.C. Sur.
Drlg. 590 ft.
Gulf Prod. Co.'s No. 10 Waddell, C NW ¼ Sec. 11, Blk. B-23.
Elev. 2,775 ft.; drlg. 3,375 ft.; flowing by heads every 2 hrs.
Gulf Prod. Co.'s No. 1 Henderson, 1,313 ft. from S and 1,322 ft. from E, Sec. 3, Blk. B-23, P.S.L. Sur.
Elev. 2,778 ft.; shut in for storage 3,523 ft.; flowed 805 bbls. in 10½ hrs.; shot twice; C.O.
Gulf Prod. Co.'s No. 1 M. B. McKnight, 660 ft. from S and W, Sec. 9, Blk. B-21.
Elev. 2,778 ft.; T.D. 3,713 ft.; C.O.; 3,000 ft. fluid in hole.
Gulf Prod. Co.'s No. 1 Waddell, C NW NW Sec. 4, Blk. B-27, P.S.L. Sur.
Drlg. 4,894 ft.
H. L. Holloway's No. 1 Mayberry, 2,440 ft. from SW and SE, Sec. 17, Blk. 35, H.& T.C. Sur.
Drlg. 780 ft.
Magnolia Pet. Co.'s No. 1 Edwards, 330 ft. from S and 1,650 ft. from E, Sec. 2, Blk. B-23.
Elev. 2,778 ft.; T.D. 3,615 ft.; hole filled 2,600 ft. with sulphur wtr.; to P.B. and acidize.

Crockett County

Adkins Bros.' No. 1 Shannon, 320 ft. from S and 630 ft. from W of 80 in SW ¼ Sec. 27, Blk. WX, G.C.&S.F. Sur.
Machine.
Leslie-Hiller et al's No. 1 Todd, 1,200 ft. N and 330 ft. E, Sec. 36, Blk. WX, G.C.& S.F. Sur.
T.D. 820 ft.; set csg.
Humble Oil & Ref. Co.'s No. 1 Couch, C NW Sec. 3, Blk. QR, G.C.&S.F. Sur.
Elev. 2,538 ft.; temp. abnd. 1,881 ft.

Culberson County

Anderson-Prichard Oil Corp., Magnolia Pet. Co. et al's No. 1 Borders, 1,255 ft. N and 2,305 ft. from W, Sec. 34, Blk. 69, P.S.L. Sur.
Straightening hole; T.D. 1,703 ft.
Miller Bros.' No. 1 fee, 1,900 ft. from N and 660 ft. from E line of Sec. 31, Blk. 97, P.S.L. Sur.
S.D. 2,137 ft.

Dawson County

Adams & Turner's No. 1 John Robinson, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 46, Blk. M, E.L.R.R. Sur.
S.D. 4,860 ft.
O. P. Dickinson, trustee's No. 1 C. H. Doaks, 368 ft. from S and 330 ft. from E of SW cor., Sec. 4, Blk. H, E.L. Ry. Co. Sur.
S.D. 265 ft.

Ector County

Continental Oil Co.'s No. 1 Wight, 2,200 ft. from S and W, Sec. 21, Blk. 43, Twp. 1s, T.&P. Sur.
Fishing 1,687 ft.
Gulf Prod. Co.'s No. 2 Goldsmith, 2,200 ft. from N and 440 ft. from E lines of Sec. 15, Blk. 44, Twp. 1s, T.&P. Sur.
Cellar.
Eppenauer Drlg. Co. et al's No. 1 Wight, 440 ft. from N and W of NE ¼ Sec. 22, Blk. 43, Twp. 1s, T.&P. Sur.
Drlg. 2,800 ft.
Landreth Prod. Co.'s No. 1-B Blakeney, 440 ft. from S and W, Sec. 22, Blk. 44, Twp. 1n, T.&P. Sur.
Elev. 3,172 ft.; T.D. 4,300 ft.; P.B. 4,275 ft. and tested sulphur wtr.; now P.B. to 4,260 ft.
Landreth Prod. Co.'s No. 1 Blakeney, 440 ft. from N and E, Sec. 28, Blk. 43, Twp. 1n, T.&P. Sur.
Elev. 3,066 ft.; drlg. 4,075 ft.; estimated 3,000,000 ft. of gas.
C. L. Peters' No. 1 Connell, 330 ft. from N and E lines of NW of Sec. 12, Blk. B-16, P.S.L. Sur.
T.D. 3,296 ft.; W.O.C.
Phillips Pet. Co. and Pure's No. 1 C. Cowden, 2,200 ft. from N and 440 ft. from W. Sec. 14, Blk. 44, Twp. 1s, T.&P. Sur.
Elev. 3,100 ft.; T.D. 4,171 ft.; packer stuck; showed 10 bbls. oil per hr. on D.S. test, 4,060-71 ft.
Phillips Pet. Co. and Pure Oil Co.'s No. 2 C. Cowden, 440 ft. from S and W, Sec. 23, Blk. 44, Twp. 1s, T.&P. Sur.
Elev. 3,102 ft.; drlg. 3,944 ft.
Sun Oil Co's No. 1-B Wight, 2,200 ft. from S and 440 ft. from E, Sec. 10, Blk. 43, Twp. 1s, T.&P. Sur.
R.U. rotary.

El Paso County

Tri-State Oil Co.'s No. 1 Kinkel, 190 ft. from N and 550 ft. from E, Sec. 237, A.T.&S.F. Sur.
T.D. 750 ft.; running csg.

Fisher County

Tide Water Oil Co. et al's No. 1 W. E. Hittson et al, 1,320 ft. from N and 660 ft. from W, Sec. 177, Blk. 2, H.&T.C. Sur.
Elev. 1,871 ft.; T.D. 3,590 ft.; U.R. csg.

Glasscock County

John I. Moore et al's No. 1 J. S. McDowell, 1,980 ft. from N line and 660 ft. from E line of Sec. 32, Blk. 34, Twp. 2s, T.&P. Sur.
Topped lime 9,471 ft.; show oil and gas 9,484-9,520 ft.; increase oil 9,594-9,600 ft. and 9,633-55 ft.; drlg. 9,992 ft.

Howard County

John I. Moore et al's No. 1 Snyder, 330 ft. from S and W, Sec. 28, Blk. 30, Twp. 1s, T.&P. Sur.
Elev. 2,302 ft.; S.D. 3,010 ft.; 500 ft. oil in hole.

Jeff Davis County

C. M. Joiner's No. 1 Jones & Coffield, 770 ft. from N and 1,322 ft. from E, Sec. 8, Blk. 3, H.&T.C. Sur.
Drlg. 1,596 ft.

Jones County

J. W. Barton's No. 1 C. W. Logsdon, 150 ft. from N and 150 ft. W of Wichita Valley R.R. Sur., but in Hy. Millard Sur.
Drlg. 1,155 ft.
Campbell et al's No. 1 Rowell, in E half of W half, Sec. 6, T.&P. Sur.
Drlg. 2,005 ft.
R. L. Crawford's No. 1 Wattzer, 200 ft. from S and W, Sec. 1, T.&N.O. Sur.
Drlg. 650 ft.
Condor Pet. Co.'s No. 1 Asa Holt, 200 ft. from S and E lines of Sec. 2, Blk. 20, T.&P. Sur.
T.D. 1,770 ft.; U.R. csg.
Davenport & Hughes' No. 1 J. D. Farrell, 1,100 ft. from N and 1,540 ft. from E. Sec. 6, Blk. 15, T.&P. Sur.
Drlg. 1,250 ft.
A. B. Farris et al's No. 1 J. W. Jennings, 1,980 ft. from S and 660 ft. from E, Sec. 207, B.B.B.&C. Sur.
T.P. and T.D. 2,040 ft.; made two 60-bbl. flows in 24 hrs. before cmtng. csg.
N. H. Martin & Son's No. 1 King, 200 ft. from N and W of E half, Sub. 5, M. Bueno Sur. 197.
Drlg. 800 ft.
Sandy Ridge Oil Co.'s No. 3 Jones, 1,530 ft. from N and 660 ft. from W, Sec. 5, Blk. 15, T.&P. Sur.
Location.

Kimble County

Wilcox Oil & Gas Co.'s No. 1 J. Patterson, 200 ft. from N and E, Sec. 1, D.&P.R.R. Sur.
Drlg. 1,712 ft.

Loving County

D. C. Evans' No. 1 W. D. Johnson, 2,310 ft. from N and 1,650 ft. from W, Sec. 12, Blk. 57, Twp. 1, T.&P. Sur.
T.D. 2,173 ft.; S.D. for repairs.
Mason Oil Co.'s No. 1 Kyle, 1,980 ft. from S and E, Sec. 22, Blk. 55, Twp. 1, T.&P. Sur.
Drlg. 2,800 ft.; hole full S.W. 2,740 ft.

Lynn County

Hart Oil Co.'s No. 1-A Edwards, 425 ft. from N and 865 ft. from E lines, Sec. 29, Blk. 1, L.&S.V. Sur.
T.D. 2,892 ft.; U.R. 9-in. csg.

Martin County

Wright & Scott's No. 1 Flannigan, 330 ft. N and E, Sec. 22, Blk. 37, Twp. 1s, T.&P. Sur.
S.D. 100 ft. for csg.

McCulloch County

Poulter et al's No. 2 Wyres, 50 ft. from S and 160 ft. from W, P. W. Rocins Sur.
Drlg. 212 ft.

Mitchell County

Sawtell & Grueber's No. 1 Morrison.
Drlg. 2,385 ft.
Texas Co.'s No. 1 Terry, 300 ft. from S and 1,650 ft. from E of W 485 acres, Sec. 62, Blk. 29, W.&N.W. Sur.
Drlg. 2,510 ft.

Pecos County

Adams et al's No. 2 Masterson, 1,630 ft. from SE and 330 ft. from SW, Sec. 104, Blk. 10, H.&G.N. Sur.
Drlg. 1,341 ft.; flowing 25 bbls. oil daily.
Comanche P. L. Co.'s No. 1 Schreff-Blackmore, 330 ft. from SW and 1,650 ft. from SE lines of Sec. 38, Blk. 3, H.&T. C. Sur.
Spudded and S.D.
Gulf Prod. Co.'s No. 7 White & Baker, 330 ft. from N and E, Sec. 15, Blk. Z, T.C.Ry. Sur.
Location.
W. Hicks' No. 1 Fromme, 1,980 ft. from NE and 2,310 ft. from SE, Sec. 106, Blk. 10, H.&G.N. Sur.
Location.
C. R. Richards' No. 4 Courtney, 920 ft. from N and W, Sec. 78, Blk. OW, 360 ft. S of No. 2.
Elev. 2,967 ft.; S.D. 362 ft.
Trans-Tex. Oil Co.'s No. 1 Caldwell, 330 ft. from E line and 330 ft. from S line of Sec. 27, Blk. 40, Twp. 9, T.&P. Sur.
Drlg. 2,500 ft.

Reagan County

Dobbs' No. 1 Friend, 2,310 ft. from S and 660 ft. from W of Blk. 3, Wm. Allen Sur., 3 or 4 miles S of Big Lake.
S.D. 2,464 ft.; P.B. to 2,440 ft.; rerunning tubing to pump 1,900 ft. oil in hole.
Culberson & Irvin's No. 1 Ringo.
T.D. 711 ft.; S.D. for U.R.

Reeves County

Dunigan's No. 1 Davis, 330 ft. from N and W, Sec. 7, Blk. 58, P.S.L. Sur.
Location.
Grisham-Hunter Corp.'s No. 1 T. P. Land Trust, 1,320 ft. from S and W lines, Sec. 27, Blk. 57, Twp. 2, T.&P. Sur.
Spudder.
Herbert Oil Co.'s No. 1 Williams & Walker, 5,280 ft. from S and 1,320 ft. from E. Sec. 17, Blk. 6, H.&G.N. Sur.
Elev. 2,536 ft.; drlg. 3,875 ft.
K. Slack et al's No. 1 Reeves, C NW ¼ Sec. 20, Blk. 56, P.S.L. Sur., 22 mi. N of Toyah.
Drlg. 1,830 ft.
Washington Oil Co.'s No. 1 J. M. Radford Grocery Co., 2,640 ft. from S and 340 ft. from E, Sec. 39, Blk. 56, P.S.L. Sur.
T.D. 502 ft.; to set csg.

Runnels County

Wolverton's No. 1 Willingham, 200 ft. from river and in C of Wilhelm-Wolfgang Sur. No. 425, 1½ mi. SE of Ballinger.
Drlg. 2,700 ft.

Schleicher County

John M. Cooper et al's No. 1 Bert Page, 1,290 ft. from N line, 1,470 ft. from W line of Sec. 40, Blk. L, G.H.&S.A. Sur.
T.D. 6,257 ft.; S.D.; set tubing and packer at 6,180 ft.; swbd. dry.
W. C. Proctor et al's No. 1 Judkins & Spencer, C SW ¼ Sec. 4, Blk. V-28.
Drlg. 1,570 ft.

Scurry County

Coffield & Guthrie's No. 1 Wade, 990 ft. from N and 330 ft. from W, Sec. 115, Blk. 97, H.&T.C. Sur.
Location.
M. L. Goos et al's No. 1 J. E. Murphy, 330 ft. from N and 1,650 ft. from E, Sec. 114, Blk. 97, H.&T.C. Sur.
Elev. 2,287 ft.; drlg. 2,297 ft.

Sutton County

Paul C. Teas' No. 1 G. S. Allison, 660 ft. from S and W, Sec. 49, Blk. A, G.W.T. &P. Sur.
Location.

Taylor County

Anderson et al's No. 1 J. C. High, 2,310 ft. from N and 990 ft. from E, Sec. 3, L.&L. Sur.
Rigged up machine.
Hickok's No. 1 Tittle, 660 ft. from N and W, Sec. 37, Blk. 19, T.&P. Sur.
Drlg. 37 ft.
Skaggs & Brewer's No. 1 McClure, 330 ft. from N and E, S half SW Sec. 8, L.A.L. Sur.
Drlg. 1,908 ft.; oil 1,854 ft.; increase oil 1,884-1,900 ft.

Tom Green County

Twin Oil Co.'s No. 1 W. E. Green, 1,650 ft. from N and 1,400 ft. from W, L. P. Moore Sur. 169½.
S.D. 315 ft.

Upton County

Gulf Prod. Co.'s No. 103 McElroy, 1,980 ft. from S and 660 ft. from W, Sec. 197, Blk. F, C.C.S.D.&R.G.N.G. Sur.
T.D. 12,786 ft.; P.B. to 9,977 ft.; perforated csg. 7,885-7,905 ft.; swbng. oil and wtr.
Humble Oil & Ref. Co.'s No. 1 Pollock, C of NW, Sec. 4, Blk. M.
Drlg. 7,964 ft.
J. G. McKenzie's No. 1 Taylor, 1,650 ft. from S and 330 ft. from E lines of Sec. 22, Blk. B-2, G.H.&S.F. Sur.
Spudding.

Ward County

Alexander's No. 1 Richter, 1,650 ft. from NW, 1,170 ft. from NE line of Sec. 27, Blk. 34, H.&T.C. Sur.
S.D. 2,440 ft. for repairs.
Bradford et al's No. 1 E. R. Allen, 660 ft. from NW line and 551 ft. from NE line, Sec. 11, Blk. 5, H.&T.C. Sur.
T.D. 1,520 ft.; trying to drive csg.
California Co.'s No. 1 Walling & Costley, 2,310 ft from SE and 330 ft. from NE lines of Sec. 18, Blk. 34, H.&T.C. Sur.
Cellar.
Caprito's No. 1 Hardage & Wilson, 2,310 ft. from NE and 990 ft. from SE, Sec. 11, Blk. 34, H.&T.C. Sur.
Drlg. 2,262 ft.
Eastland Oil Co.'s No. 1 Johnson, 330 ft. NW and NE, Sec. 24, Blk. 34, H.&T.C. Sur.
S.D. 2,465 ft.
Skelly Oil Co.'s No. 1 Citizens Natl. Bank, 330 ft. from SE and SW lines of Sec. 40, Blk. 34, H.&T.C. Sur.
Drlg. 1,050 ft.
Jerry Sines' No. 1 Brown, 330 ft. from NW and NE, Sec. 13, Blk. 5, H.&T.C. Sur.
T.D. 3,148 ft.; P.B. 3,075 ft.; S.D.
Tex-Mex Pet. Co.'s No. 1 Potts, 2,310 ft. from SE and 990 ft. from SW lines of Sec. 28, Blk. B-29, P.S.L. Sur.
Drlg. 2,023 ft.
West Texas O. & R. Co.'s No. 1-C University, 330 ft. from N and E, Sec. 6, Blk. 16.
T.D. 2,668 ft.; P.B. 2,567 ft.; pumping 30 bbls. oil and 20 bbls. water per day; plugging off water.

Winkler County

Barnsdall Oil Co.'s No. 1 Brown & Altman, 2,310 ft. from S and E, Sec. 6, Blk. B-5.
Elev. 2,844 ft.; T.D. 3,218 ft.; P.B. to 3,195 ft.; S.D., orders.
Emperor Oil Co.'s No. 1 Halley, 1,650 ft. from S and 330 ft. from E, Sec. 12, Blk. B-12.
Elev. 2,764 ft.; drlg. 2,645 ft.
Fox & Butler's No. 1 Brown & Altman, 2,310 ft. from S and 1,650 ft. from E, Sec. 6, Blk. B-5.
Elev. 2,847 ft.; drlg. 2,645 ft.
Gulf Prod. Co.'s No. 1 Keystone Cattle Co., NE of NW, Sec. 10, Blk. B-3, P.S.L. Sur.
Elev. 2,942 ft.; T.D. 3,483 ft.; flowing oil and wtr.; preparing to acidize.
Gulf Prod. Co.'s No. 2 Keystone Cattle Co., NW cor. Sec. 17, Blk. B-2.
Elev. 2,951 ft.; T.D. 3,699 ft.; shot with 500 qts. at 3,200-3,699 ft.; flowing oil and gas.
Gulf Prod. Co.'s No. 3 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 11, Blk. B-3.
Drlg. 3,363 ft.
Gulf Prod. Co.'s No. 4 Keystone Cattle Co., 330 ft. from N and E, Sec. 20, Blk. B-3.
Drlg. 3,364 ft.
Gulf Prod. Co.'s No. 5 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 6, Blk. B-2.
Elev. 2,952 ft.; T.D. 3,500 ft.; testing; estimated 150 bbls. oil and 8,000,000 ft. of gas per day.
Gulf Prod. Co.'s No. 6 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 16, Blk. B-2.
Elev. 2,950 ft.; T.D. 3,550 ft.; waiting for cmt. after running csg.
Gulf Prod. Co.'s No. 7 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 14, Blk. B-2.
Elev. 2,954 ft.; drlg. 587 ft.

Gulf Prod. Co.'s No. 8 Keystone Cattle Co. 330 ft. from S and W of Sec. 13, Blk. B-2.
Elev. 2,964 ft.; drlg. 1,130 ft.

Gulf Prod. Co.'s No. 9 Keystone Cattle Co., 330 ft. from S and W of Sec. 18, Blk. B-2.
Elev. 2,946 ft.; drlg. 1,068 ft.

Harry Adams' No. 2 Searborough, 990 ft. from N line and 990 ft. from W line, Sec. 2, Blk. 77, P.S.L. Sur.
Drlg. 2,835 ft.; show oil 2,825-34 ft.

Humble Oil & Ref. Co.'s No. 2-A Walton, 660 ft. from S and W, Sec. 48, Blk. 26, Derrick.

K-D Oil Co.'s No. 1 P. Mitchell, 1,650 ft. from N and 2,310 ft. from E, Sec. 23, Blk. B-10, P.S.L. Sur.
Derrick.

J. C. Maxwell's No. 1 Brown & Altman, 2,310 ft. from N and 990 ft. from W, Sec. 6, Blk. B-5.
Elev. 2,844 ft.; drlg. 3,000 ft.; show oil 2,720-27 ft.

Mosche Oil Co.'s No. 1 Evans, 1,170 ft. from N and 1,320 ft. from W, Sec. 46, Blk. 72, P.S.L. Sur.
Drlg. 50 ft.

Richardson's No. 1 Walton, 1,010 ft. from S and 330 ft. from W, Sec. 1, Blk. B-3 S.D. 3,524 ft.; testing; flows oil and mud; no wtr.

Skelly Oil Co.'s No. 2 Halley, 1,320 ft. from N and 2,200 ft. from E, Sec. 25, Blk. B-11, P.S.L. Sur.
S.D. 3,090 ft.

Skelly Oil Co.'s No. 3 Halley, 2,200 ft. from N and 1,320 ft. from E, Sec. 25, Blk. B-11.
Drlg. 2,660 ft.

Sinclair Oil Co.'s No. 1 Lowett, 330 ft. from N and E, Sec. 36, Blk. 26, P.S.L. Sur.
T.D. 2,742 ft.; recmtng. csg.

Sun Oil Co.'s No. 1 Halley, 2,200 ft. from N and 440 ft. from E, Sec. 24, Blk. B-12, P.S.L. Sur.
T.D. 3,170 ft.; P.B. 2,732 ft.; swbd. 10 bbls. oil and 15 bbls. wtr. per day; S.D. for orders.

Weaver et al's No. 1 T. Morton, 330 ft. from S and E of N half, Sec. 11, Blk. B-12.
Elev. 2,767 ft.; drlg. 2,852 ft.; 200 ft. oil in hole.

Yoakum County

J. J. Davidson et al's No. 1 Bennett ,1,320 ft. from N and E, Sec. 678, John H. Gibson Sur.
Elev. 3,557 ft.; top Yates 3,220 ft.; drlg. 3,420 ft.; slight show gas 3,410 ft.

Texas Panhandle Wildcats

Week Ending July 27

Carson County

Danube Oil Co.'s No. 1 Byrum, 308 ft. from N and 409 ft. from E of N½ of NE¼ Sec. 107, Blk. 4, I.&G.N. Sur.
Drlg. 2,075 ft.; 7,000,000 ft. gas at 2,030 ft.

Robert Watchorn's No. 1 Eller, 330 ft. from S and E lines of W½ and SE¼ of Sec. 9, Blk. 7, H.&G.N. Sur.
Drlg. 3,630 ft.

Childress County

Alma Oil Co.'s No. 1 Lowe, 660 ft. from N and W of SW¼ Sec. 417, Blk. H, W.&N.W. Sur., 8 of Kirkland.
T.D. 5,653 ft.; swbng. 98% wtr. with little oil.

Larkins & Warr's No. 1 M. F. Williams, at common corners of Secs. 507, 483, 484 and 508, Blk. H, W.&N.W. Sur.
Drlg. 1,376 ft.

Collingsworth County

Smith Bros.' No. 1 Pierce, C NE¼ Sec. 107, Blk. 21, H.&G.N. Sur.
Drlg. 328 ft.

Cottle County

Texas Co.'s No. 9 Johnson, 500 ft. N and 318 ft. W of most northerly cor. of J. A. Smith Sur.
Drlg. 2,658 ft.

Dallam County

Eben Warner's No. 1 Jarboe, 1,520 ft. from S line, 415 ft. from W line, Sec. 2, B.&B. Sur.
S.D. 3,450 ft.

Gray County

Bell O. & G. Co.'s No. 1 Furneaux, 434 ft. from S and E lines of SE¼ of Sec. 110, Blk. B-2, H.&G.N. Sur.
S.D. 3,262 ft. for connection.

Clark & Smith's No. 1-B Short, 126 ft. from N and 330 ft. from E of NW 40 acres, Sec. 2, Blk. 1, H.&G.N. Sur.

Drilling Exploration Co.'s No. 1 Lapold, 330 ft. S and W, Sec. 141, Blk. 3, I.&G.N. Sur.
Material.

Tom Doswell's No. 1 Herndon, 330 ft. from S and W lines of SE¼ of SW¼ of Sec. 166, Blk. 3, I.&G.N. Sur.

Farliss et al's No. 1 Ball, 330 ft. from S and E lines of NW¼ of Sec. 6, Blk. 3, B.B. Sur.
Drlg. 2,412 ft.

Hagy et al's No. 1 Chadwick, 320 ft. N and E. Sec. 210, Blk. B-21, H.&G.N. Sur.
Drlg. 2,735 ft.

Harry Foster's No. 1 Johnson, 330 ft. from N and E lines of Sec. 21, L. L. Erwin Sur. Spudded and S.D.

Warner's No. 1 Taylor, 330 ft. N and W of SE¼ Sec. 8, Blk. 8, A. W. Wallace Sur.
T.D. 3,116 ft.; swbd. 114 bbls. daily for 3 days.

McLaughlin et al's No. 1 Baggerman, 330 ft. from S and E of NW¼ Sec. 64, Blk. 3, I.&G.N. Sur.
Rig.

Plains Holding Co.'s No. 1 Morse-Gulf 320 ft. S and W, Sec. 57, Blk. 25, H.&G.N. Sur.
Material.

Vulcan Oil Corp.'s No. 1-A Kinnard, 1,180 ft. from N and 150 ft. from W lines of E½ of SW¼ of Sec. 41, Blk. 25, H.&G.N. Sur.
T.D. 2,533 ft.; pumped 13 bbls. oil per hr., 20% wtr.

Hall County

Davis et al's No. 1 Knorpp, 330 ft. S and W, Sec. 7, Blk. A, A.B.&M. Sur.
Rig.

Hartley County

O. V. Beck et al's No. 1 Matador ranch, 350 ft. from N and W of most northerly NW cor. Sec. 20, Blk. 22, Capitol Syndicate Sur.
Material.

Hutchinson County

Barnsdall Oil Co.'s No. 1 Lewis, 330 ft. N and E of W½ of E½, Sec. 7, Blk. 23, B.S.&F. Sur.
Drlg. 2,922 ft.

Gulf Prod. Co.'s No. 1 Pitcher, 330 ft. N and W, Sec. 19, Blk. M-21, T.C. Sur.
Rig.

Humble O. & R. Co.'s No. 1 Williams, Sec. 137, Blk. 5-T, T.&N.O. Sur.
Location.

Owl Oil Co.'s No. 1 Moore, 275 ft. S and W of NW 80 acres of NW¼, Sec. 21, Blk. M-21, T.C. Sur.
Drlg. 2,281 ft.

Phillips Pet. Co.'s No. 1 Daniel Dial, 330 ft. from S and 325 ft. from E lines of Sec. 36, Blk. M-23, T.C.R.R. Sur.
Location.

Power Pet. Co.'s No. 1 Hodges, 660 ft. S and E of most southerly 80 acres of S 160 acres of SE 200 acres, Sec. 16, Blk. M-35, T.C. Sur.
Rig.

Stinnett Oil Co.'s No. 1 Starnes, 330 ft. from N and 275 ft. from W of E½ of NW¼ Sec. 22, Blk. M-23, T.C. Ry. Sur.
S.D 330 ft.

Texas Plains Oil Co.'s No. 1 State, 2,500 ft. SW of SW cor. of Sec. 15, Blk. 47, H.&T.C. Sur., and 330 ft. from N bank of Canadian River.
S.D. 350 ft.

King County

Davis, Heydrick et al's No. 1 Masterson, NE cor. Blk. 50, P. P. Knotts Sur.
S.D. 4,505 ft.

Moore County

Alma Oil Co.'s No. 1 Ward, 330 ft. N and W of SW¼, Sec. 63, Blk. 44, H.&T.C. Sur.
Drlg. 3,440 ft.

Shamrock O. & G. Co.'s No. 1 Bruley & Ryan, C SW¼ of NE¼ Sec. 168, Blk. 3-T, T.&N.O. Sur.
Drlg. 2,712 ft.

Ochiltree County

U. S. Oil Corp.'s No. 1 W. R. Norris, 330 ft. S and 990 ft. E, Sec. 212, Blk. 43, H.&T.C. Sur.
Rigged up.

Randall County

English et al's No. 1 Oxnard, 350 ft. from N and 1,320 ft. from E lines of NE¼ Sec. 85, Blk. 2, A.B.&M. Sur.
S.D. 5,685 ft.

Wheeler County

C. & H. Drlg. Co.'s No. 1 Binkley, 330 ft. from S and W lines of NE¼ of Sec. 25, Blk. 24, H.&G.N. Sur.
S.D. 3,446 ft.

H. G. Barnett et al's No. 1 Pryor, 330 ft. N and E of E½ NE¼ Sec. 48, Blk. 13, H.&G.N. Sur.
S.D. 2,245 ft.; H.F.W. 2,244-45 ft.

Northern Texas Utilities' No. 1 Calhon, 330 ft. from N and E of SE¼, Sec. 72, Blk. 13, H.&G.N. Sur.
T.D. 2,155 ft.; P.B. 2,134 ft.; C.O. and swabbing.

Phillips Pet. Co.'s No. 1 Binkley, 330 ft. N and 990 ft. W of W½ of SW¼, Sec. 49, Blk. 24, H.&&G.N. Sur.
T.D. 2,557 ft.; P.B. 2,295 ft.; to complete as gasser.

Smith Bros.' No. 1-B Harlan, 330 ft. from N and 990 ft. from W lines of W½ of SW¼ of Sec. 49, Blk. 24, H.&G.N. Sur.
T.D. 2,582 ft.; 200 bbls. daily.

Rocky Mountain Runs

Estimated daily average production for the week ending July 27 follows:

WYOMING

Salt Creek	16,850
Big Muddy	1,570
Badger Basin	30
Black Mountain	290
Byron	1,020
Dallas Derby	530
Dutton Creek	80
Elk Basin	110
Ferris	20
Frannie	810
Garland	1,540
Grass Creek	6,110
Greybull	10
Hamilton Dome	2,220
Hudson	370
LaBarge	1,100
Lance Creek	1,500
Lost Soldier	1,480
Mule Creek	Shut in
Midway	80
Notches	Shut in
Oregon Basin	3,210
Osage	820
Pilot Butte	30
Rex Lake	Shut in
Rock River	1,570
South Casper	580
Poison Spider	250
Teapot	20
Waugh Dome	210
Total Wyoming	42,410

MONTANA

Buckley-Border	240
Cat Creek	870
Cut Bank	5,200
Dry Creek	400
Kevin-Sunburst	3,400
Lake Basin	50
Pondera	1,000
Total Montana	11,160

COLORADO

Florence	190
Fort Collins and Wellington	410
Iles Dome	2,800
Moffatt	390
Orchard	50
Rangely	80
Tow Creek	180
Total Colorado	4,100

NEW MEXICO

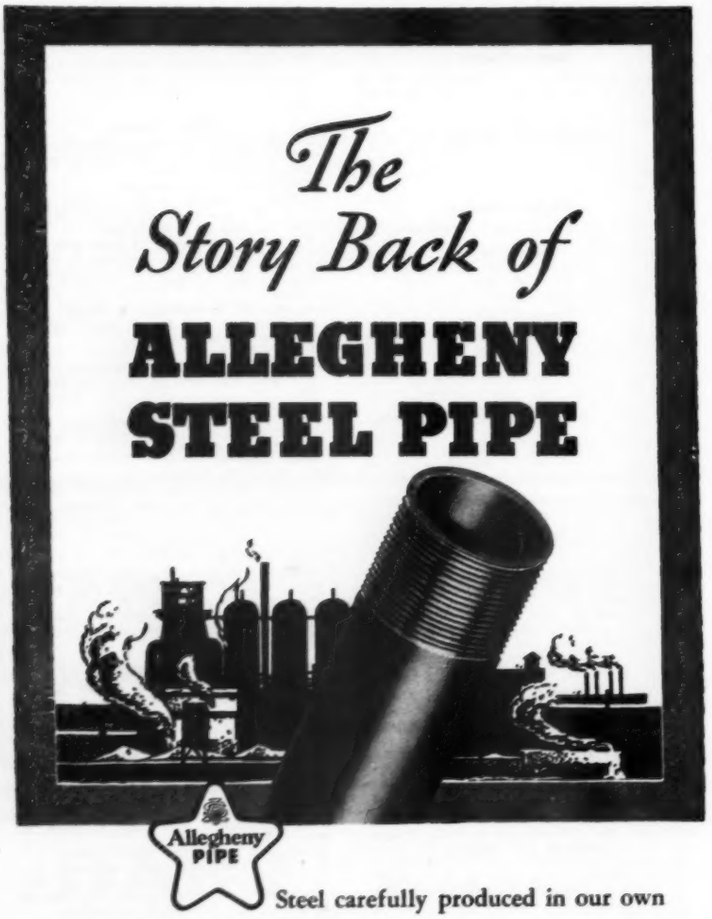
Artesia	440
Cooper area	6,170
Eunice Area	8,000
Hobbs	31,360
Hogback	150
Hospah	Shut in
Jal	4,240
Lea area	1,340
Maljamar	1,470
Rattlesnake	750
Table Mesa	90
Total New Mexico	54,010
Total Rocky Mountain region	111,680

Sells Gas Output

SARNIA, Ontario, July 29.—The Sarnia Oil & Gas Co. will spend approximately $16,000 on transmission lines to deliver production of its wells in Sarnia and Enniskillen Townships to the Dominion Salt Co. at Sarnia.

Tulsa Exposition

WASHINGTON, D. C., July 29.—The Senate today passed Senator Gore's resolution authorizing the President to invite foreign nations to participate in the International Petroleum Exposition to be held in Tulsa next May. The resolution was sent to the House where early approval is expected.



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QUESTIONS ON TECHNOLOGY

By Charles K. Francis, Ph. D., Technical Editor

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit problems to Dr. C. K. Francis. Questions should give as much detail as possible. Inquiries must be signed but only the given initials will be printed. The source of questions is considered confidential. Questions requiring discussion of patents, the use of intricate formulas, extended computations, or cost estimates cannot be considered in these columns

Cracking Per Pass and Recycle Ratio Checked by Coke Formed

Would you please advise me the proper method used to calculate the recycle ratio and the conversion per pass of a cracking unit?—H. H. L.

The important factor limiting the time for continuous operation when cracking a petroleum oil, is the formation and deposition of carbon in the tubes of the still. A cracking still is not continued in operation after signs of carbon deposits (coke) are observed. The practice is to continuously remove the residue from the cracking zone and then return a part of it to the still, as recycle stock, mixed with the charge of fresh oil, or to recrack the residue in a separate unit.

Coke and carbon deposits are most readily produced from the aromatic compounds and the larger hydrocarbon groups which naturally accumulate in the residue. It follows that if only a small quantity of lighter products, gasoline, is produced from the cracking operation that there would be formed under this condition a relatively light liquid containing no coke and increase in the yield of gasoline would result in the formation of a heavier residue. A stage is soon reached in the yield of cracked gasoline beyond which the residue becomes so heavy that coke is rapidly deposited. The higher the percentage of gasoline made, the greater the quantity of coke formed.

The different crude oils may be skimmed and cracked to yield from 10 to nearly 80 per cent gasoline of U. S. Motor grade. This means that the yield of gasoline, consequently the quantity and type of residue, varies with the kind of oil processed. There is also to be considered the quantity of gas, which increases with the yield of gasoline up to about a 40 per cent production when decomposition of the gasoline becomes rapid. After this there is less gasoline made and the proportion of gas formed increases.

All of these conditions have led to the conclusion that when designing a cracking still to meet the average condition it is advisable to provide for an operation which will give a yield of 20 per cent gasoline on a once through basis. Frequently the still is built on a guarantee of 16 to 18 per cent conversion per pass. There is no accurate method for calculating this but it has to be arranged after laboratory examination of the charging stocks and distillates together with the data obtained in actual runs.

Recycle ratio refers to the proportion of residue to fresh oil charged. This may run from two-thirds to one-tenth, the ratio in the Mid-Continent averages close to one-third. Recycle ratio is bound in with conversion per pass, and it must also be determined by experience and trial.

Swelling Properties of Bentonite May Cause Movement of Strata

It has been explained to me that certain oil formations, especially along the Gulf Coast, are due to the swelling properties of Bentonite. Will you kindly give me your reaction to this and something about the nature of Bentonite especially in relation to any power of this sort—G. R. L.

The detailed properties of bentonite have been described in Bentonite, Technology and Industrial Uses, by American Colloid Co., from which the extract following has been made:

"For many years the name bentonite was applied only to that peculiar type of clay found in eastern Wyoming and adjacent regions, but recently the term has been extended to cover a broad class of clay-like materials, (1) deposits of which are found in many other localities. These other "bentonitic" clays (2) are vastly different from the Wyoming variety in physical activities.

"Eastern Wyoming bentonite—called "true bentonite"—may be readily distinguished from other bentonitic clays by several distinctly unique properties, chief among which are its remarkable swelling propensity, its ability to form gelatinous pastes with water, and to form gels which remain in suspension in thin water dilutions.

"When put into water Wyoming bentonite expands 10 to 30 times its original volume to form gelatinous masses. This swelling is mainly due to sorption—each individual particle attracting to itself a capillary sheath of water, which pushes them apart; also to a minor extent to absorption of water into the plate-like structure of the particles, spreading the plates apart. The swelling is reversible; it can be dried and re-expanded an indefinite number of times, if clear water is used. Its swelling properties are unaffected by temperatures below 450° F. At that figure they begin to be diminished but in the best grades of Wyoming bentonite these properties are not completely destroyed until about 1,200° F.

"The swelling is also inhibited in acid solutions, or if added to strongly alkaline solutions after such solutions are formed. Peculiarly, if the bentonite is first allowed to swell in clear water, and alkali added to the gel afterward, it will be made thicker, while if added in the opposite order, it will be thinner. The action of electrolytes on bentonite does not follow the same rules as for other clays.

"Its swelling properties are enlisted for sealing ditches and dikes, also the walls of oil wells during drilling. If loosely packed in crevices or pipes it will swell from contact with water so as effectually to close the opening against high pressures; it will not permanently harden and can be easily removed."

It is thought by many authorities that the peculiar swelling that results when water is added to bentonite causes the movement, heaving and thrusting, of the formations laid down above or adjacent to a bentonite formation. Formations favorable for oil accumulations would result, the mechanics being similar to that in salt domes.

References—East Texas Oil Field, by H. E. Minor and M. A. Hanna, Bull. Amer. Assn. Petrol. Geol., 17, 757, 1933; Water-laid Volcanic Rocks, etc., by C. S. Ross, H. D. Miser and L. L. Stephenson, U. S. Geol. Survey, Prof. Paper 154, 1928; History of Development and Geology, East Texas, by L. G. E. Bignell and L. E. Bredberg, The Oil and Gas Journal, Aug. 13, 1931, page 106.

Oxidation of Lower Hydrocarbons for Production of Aldehydes

Has there been any commercial development for the manufacture of aldehyde from natural gas or the simple hydrocarbons?—M. P. A.

The oxidation of the lower hydrocarbons, methane and ethane, has received much attention by investigators. The conditions are fully discussed in Catalytic Oxidation of Organic Compounds in the Vapor Phase, by Marek and Hahn. Quoting from this book, page 170:

"Ledbury and Blair have proposed conditions for commercial operation to form 1 ton of formalin per day. A mixture having an initial composition of 80 per cent methane and 20 per cent oxygen is passed through a heating zone at 700° C. with a time of contact of one second and formaldehyde scrubbed from the exit gas. It is estimated that 30 per cent recovery of methane as formaldehyde could be accomplished. The cost of operation is estimated at $180 per ton of formalin exclusive of the cost of methane.

"The authors were forced to conclude that the industrial oxidation of methane for the manufacture of formalin could only be considered as economically feasible if methane could be obtained in large quantities at a very low cost. It does not appear that there is any immediate likelihood of the formaldehyde produced in this way competing with that produced from coal through the intermediate agency of water gas and methanol. Without doubt more efficient methods for the atmospheric pressure oxidation of methane will be devised. Nash and Stanley are confident that a process for the manufacture of formaldehyde from methane, which is capable of competing with the existing methanol oxidation process, will be perfected. A natural gas containing 93 per cent methane, 3.5 per cent ethane, and 3 per cent nitrogen has been successfully converted to hydrogen and carbon monoxide and the formation of formaldehyde by this means may succeed where direct oxidation is out of the question."

Pioneering work within the field of oxidation of paraffin hydrocarbons was done by the Empire Refining Co. Large quantities of formaldehyde have been produced by this company by the partial oxidation of natural gas.

References—B. Brooks, Jr. Inst. Pet. Tech. 24, 744, 1928; Ledbury and Blair, Brit. Dept. Sci. Ind. Research, Rept. No. 1, 1-54 (1927); Nash and Stanley, Fuel 7, No. 9, 397-401 (1928); Boomer, 9th Annual Rept. Sci. Ind. Res. Council Alberta, 1929, 51-3; compare Chapter 9.

Turner Valley Field Wells Produce Gasoline Suitable for Motor Fuel

The statement has been made that there are commercial oil wells producing gasoline which is used as motor fuel without refining. Could you tell where such wells are located?—B. S. H.

There are many instances where large gas wells, producing wet gas, yield a drip or condensate which collects in the separator and lines. This product is frequently used, without treatment, for motor fuel.

The reference is probably made to the Turner Valley, Alberta, Canada, about 30 miles southwest from Calgary. This field was discovered in 1913. The normal well in this field shows an initial production of about 250 bbls. a day, but soon settles to 50 to 60 bbls. The oil may vary in gravity from 40° to 80° A.P.I., a large part of it being a colorless naphtha suitable for motor fuel as produced. The wells produce large quantities, in excess of 25,000,000 cubic feet per day, of wet gas, some of which is treated for the removal of sulphur.

PERSONAL PARAGRAPHS

W. B. CRUTCHER, division superintendent, Carter Oil Company, at Ponca City, Okla., is on his vacation.

GEORGE LOCHNER of Great Falls, Mont., is drilling superintendent in charge of Moose Oils' No. 1, Moose Dome structure, west of Calgary.

F. W. FLOYD of the Carter Oil Company has just completed a two weeks' trip to the company's properties in all divisions in Oklahoma and Kansas.

MR. and MRS. ANTHONY BREGANT and son, JUNIOR, of San Diego, Calif., have been spending a month's holiday in Calgary and Alberta points.

CHARLES E. BROWN, president of the Midland Coal & Lumber Company of Miles City, Mont., recently visited the drilling operations on the Moose Dome west of Calgary, Alberta.

BYRON B. NORRIS has resigned as petroleum engineer of the Division of Corporations of the State of California to practice as a consulting engineer and has opened offices in Los Angeles.

E. H. SMITH, in the land department of the Texas Company at Houston, Tex., is on a two weeks' vacation in Missouri.

LOU TIDD, credit manager for Black, Sivalls & Bryson, Inc., Oklahoma City, is spending 10 days in Texas on company business.

J. R. GAHAN, second vice president of the Tide Water Oil Company at Houston, Tex., is spending a few weeks' vacation in California.

FLORENCE LUNDELL, librarian technical department, Tulsa Public Library, has recently returned from a combined business and vacation trip in Colorado.

W. A. MONCRIEF and family are spending the summer at Denver, Colo. Mr. Moncrief is a well-known independent operator of Fort Worth and Houston, Tex.

G. W. WILCOX, in the land department of the Texas Company at Houston, Tex., is spending a two weeks' vacation at his favorite fishing grounds along the Gulf.

BRUCE CLARDY, head of the crude oil purchasing department for Shell Petroleum Corporation, Houston, Tex., was a business visitor in Dallas, Tex., during the week.

C. E. CLASON, who has been placed in charge of all acidizing work for the Halliburton Oil Well Cementing Company, will have offices in Wichita and Hutchinson, Kans.

JOHN TRENCHARD, San Antonio, Tex., independent operator and member of the partnership of Whisenant & Trenchard, is spending several weeks' vacation on the Pacific Coast.

FRED KIMBELL and ROSS STEELE, both in the engineering department of the Stanolind Oil & Gas Company, have been transferred from Fort Worth, Tex., office to Houston.

HOWARD WHITEHILL of Tulsa, independent operator, is taking a vacation in California.

FRED K. FOSTER, petroleum geologist of San Antonio, Tex., was in Tulsa for a few days recently on a business trip.

LOU HILTON, sales manager for Cameron Iron Works, Houston, Tex., was a business visitor in Fort Worth during the week.

JACK MEEK, in the land title department of the Stanolind Oil & Gas Company, Fort Worth, Tex., has returned from a business trip to Trinidad, Colo.

VERNON F. TAYLOR, president of the Peerless Oil & Gas Company and the Cargray Corporation was in Tulsa last week while en route by airplane to Pampa, Tex.

FRANK WICKS, for 50 years engaged in drilling in Ontario and foreign fields, recently finished his last dry hole and retired from active work. He will make his home at Warwick, Ontario.

FRANK CHAMPION, sales manager of Byron Jackson Company, was married on July 3 to FLORA LAMB.

R. D. GOODRICH, head of the Rio Oil Corporation, Fort Worth, Tex., spent most of the week in Houston, Tex., on business.

JOHN BROWN, of the sales department of the Anglo-Ecuadorian Oilfields, Ltd., arrived in New York City from Ecuador.

FLOYD A. CALVERT, general attorney in Michigan for the Pure Oil Company, spent one day this week in the Chicago offices on business.

B. H. KAUFMAN has been promoted to district service station manager of the Joplin district of the Mid-Continent Petroleum Corporation.

H. L. MOURER, of Tulsa, president of the Crude Oil Corporation of America, spent a few days of his vacation at the home of J. A. BUCHER, Bolivar, N. Y., vice president of the company, on his way to visit his aged father at Youngsville, Pa.

EDWIN M. JONES, independent operator, San Antonio, Tex., is visiting California on a vacation trip.

C. D. WATSON, director of production operations, Carter Oil Company, Tulsa, is in Washington, D. C., on business.

F. W. ROBSON, engineer, Carter Oil Company, Tulsa, is spending a two weeks' vacation at Noel, Mo., accompanied by Mrs. Robson.

H. D. McCRACKEN, vice president in charge of the Texas division of the Illinois Pipe Line Company, is on vacation in the Ozarks of Arkansas.

RALPH STEINMAN, chief scout for Sinclair Prairie Oil Company, is recovering from a severe illness and is able to be at his office a part of each day.

GEORGE W. McMURRY, independent operator, San Antonio, Tex., is on a several weeks' trip to the West Coast, visiting Seattle, Vancouver and other points.

C. L. JOHNS, scout for the Pure Oil Company at Corpus Christi, Tex., was a business visitor to the company's offices at Houston, Tex., the past week.

CHARLES NOBLE, scout for the Superior Oil Producing Company at Houston, Tex., is in the Memorial Hospital, recovering from a case of typhus fever.

FRED S. WRIGHT, land man, and BOB BRENNARD, scout, both with the California Company, the former at Midland, Tex., and the latter at Colorado City, Tex., have been transferred to Louisiana temporarily.

PHIL T. WILKINSON, head of the civil engineering department of the Stanolind Oil & Gas Company for the Gulf Coast and West Texas divisions, has been transferred from Fort Worth to Houston. W. S. WORLEY,

Do You Remember?

From The Oil and Gas Journal Files

25 YEARS AGO

August 2, 1910

John M. Crawford, of Parkersburg, W. Va., arrives in London, England. He will doubtless visit the old home town of Londonderry, Ireland, before returning.

H. A. Melat, superintendent of the Guffey Petroleum Co., will move his office from Beaumont, Tex., to Shreveport, La., and give all his attention to the Caddo Field.

A well three-quarters of a mile northeast of the famous Lakeview gusher in the Midway Field, California, has just come in making 20,000 bbls. per day. The Lakeview gusher is still pouring out 21,000 bbls. per day.

20 YEARS AGO

August 4, 1915

The Prairie Oil & Gas Co. raises the price of Oklahoma-Kansas crude 10 cents per barrel, making it 50 cents. It is the first advance in 15 months.

The famous Paden "mystery" well drilled by the Prairie Oil & Gas Co. in Okfuskee County, Oklahoma, has at last been opened and it is a hole full of water. It has been shut in eight months and was the cause of all sorts of discussion, sometimes humorous and sometimes bitter. It is all over now.

William B. Phillips, director of the Bureau of Economic Geology and Technology of the University of Texas, will, on September 1, assume the presidency of the Colorado School of Mines. The Colorado school will hereafter pay more attention to oil and gas geology.

10 YEARS AGO

August 6, 1925

Thirty-three pools or fields in the United States produce 15,000 bbls. per day or more. Fourteen of these are in California, eight in Oklahoma, nine in Texas, one in Wyoming and one in Arkansas. They contain 29,000 wells, producing an average of 50.3 bbls. per day per well.

James W. Stewart, son of Col. Robert W. Stewart, chairman of the board of the Standard Oil Co. (Indiana), and who entered the oil business as a tool dresser in the Lance Creek Field, Wyoming, and worked his way up by degrees, has risen to be vice president of the Midwest Refining Co., and a member of the board of directors.

After three years of drilling, the deepest well in the world, Peoples Natural Gas Co.'s test near Latrobe, Pa., is finished. The hole is bottomed at 7,756 feet. It produces gas with a strong hydrogen sulphide content.

engineer, has been assigned to the civil engineering department of the company and moves to Tyler, Tex.

I. L. DUNN, general superintendent for the Delaware Consolidated Oil Company, and member of the firm of Dunn and Lewis has recently returned from a trip to California.

JOHN BARNEY WHISENANT, member of the partnership of Whisenant & Trenchard, petroleum engineers, geologists and operators, San Antonio, Tex., left this week for a vacation trip through Colorado and thence to the Pacific Coast.

M. J. DAVIS, president of Globe Royalties, Ltd., of Calgary, Alberta, is on a business trip to interior British Colombia.

E. W. BOWNESS of Calgary, Alberta, recently visited Edmonton, where he conferred with officials of Northwestern Utilities, Ltd.

W. S. NIX, assistant superintendent of the Shell Oil Company's Dominguez, Calif., refinery, and EMIL A. ROMER, who has been chief engineer at the Dominguez refinery for several years, have been transferred to the home office of the company in San Francisco.

LEONARD S. (SPIDER) ALLEN, representative of the Mid-Continent Supply Company, has recently made a trip to St. Louis, Mo.

JOHN W. CUSHING, assistant division manager, Wiser Oil Company, Bartlesville, Okla., and family, are spending their vacation at Calgary, Alberta, Canada.

PLUMMER H. (BUD) ENOCHS, of the Union Oil Company, was moved to the home office at Los Angeles as a member of the sales promotion group some time ago as a result of his work in the Wilmington laboratory.

JOHN LORENZEN, with Standard Oil Company (Indiana) at Billings, Mont., is visiting his parents, MR. and MRS. J. G. LORENZEN, of Sheridan, Wyo.

CLAIR CLARK, formerly with the U. S. Geological Survey in South Dakota, has accepted a position with the Indian Territory Illuminating Oil Company geological staff.

K. I. (JACK) DUNN has been placed in charge of the Panhandle office of the Texas Railroad Commission at Amarillo. ALEC CROWELL has been appointed to the Pampa office of the commission as engineer.

HERBERT F. BEARDMORE, formerly petroleum engineer for the Indian Territory Illuminating Oil Company in the Oklahoma City Field, has been made district engineer in the Seminole area for the Amerada Petroleum Corporation.

GEORGE H. GABLER, of the Imperial Oil, Ltd., sales department at Sarnia, Ontario, has been transferred to Toronto. Before his departure he was presented by department heads with a mantel clock and by the sales service staff with a silver service.

JACK E. MANNING, brother of FRED MANNING, of the Manning & Terry Drilling Company, and MISS GRETCHEN FREEMAN, of Cut Bank, Mont., were married at Casper, Wyo. Mr. Manning is with the Perkins Oil Well Cementing Company at Casper.

Planning for Big A. P. I. Meeting

As president of the California Oil and Gas Association Charles S. Jones will be the official representative of the California oil industry when the American Petroleum Institute meets in Los Angeles next November, and he is in charge of plans for the entertainment of the visitors. He is executive vice president of the Rio Grande Oil Company and chairman of the committee on transportation and highways of the Los Angeles Chamber of Commerce.

CHARLES S. JONES

Mr. Jones, who was born in Bonham, Tex., in 1899, became associated with the Rio Grande in 1916 shortly after it was founded. He was elected a director two years later and in 1923 became vice president and treasurer. He supervises all company operations on the Pacific Coast. The Rio Grande is a subsidiary of Consolidated Oil Corporation. Mr. Jones was retained as an officer of the Rio Grande upon acquisition of control by Consolidated.

Upon organization of the Pacific Coast Petroleum Agency last year Mr. Jones was elected vice president and he has been very active in the agency's affairs.

The American Petroleum Institute meeting, for the entertainment of whose delegates Mr. Jones is busily planning, is expected to draw an unusually large attendance this year, not only because California always has held out peculiar attractions to visitors but because the World's Fair in San Diego will be on at the same time the oil men are holding their sessions in Los Angeles. Unquestionably delegates will make their plans so they can attend the fair as well as the institute's meetings.

V. S. PENOTE, of the Cleveland Trencher Manufacturing Company, Cleveland, Ohio, is making a trip through the Mid-Continent fields and stopped off in Tulsa.

DAVID L. TRAX, petroleum engineer, Gypsy Oil Company, Tulsa, accompanied by his wife, spent two weeks' vacation in Jackson Hole and Yellowstone Park, Wyoming, and returned via South Dakota.

A. O. OLSON, independent producer and drilling contractor, Tulsa, has been under the doctor's care for the past month for general run-down condition and left last week for a vacation in Minnesota to recuperate.

H. L. BURCHFIELD, geologist for the Standard Oil Company of California, who has spent the past two years making geological surveys in Arabia, passed through Dallas, Tex., en route to his company's headquarters at San Francisco, Calif.

GEORGE PROUTT, sales engineer for the General Electric Company, Dallas, Tex., is on duty with the 972nd Antiaircraft Battery at Fort Crockett, Galveston, Tex. Mr. Proutt holds a captaincy in the coast artillery branch, Officers Reserve Corps.

H. W. PONTIUS, in the land department of the Marathon Oil Company, San Angelo, Tex., is taking two weeks' training with his regiment at Fort Crockett, Galveston, Tex. Mr. Pontius holds a reserve first lieutenancy in the anti-aircraft branch of the Coast Artillery Corps.

MISS THELMA STOODLEY of Calgary, Alberta,, and GEORGE PATTERSON of Barranca-Bermeja, Colombia, will be married at Panama on August 8, returning later to Colombia to make their home.

DR. H. S. WASER, superintendent of the Wood River, Ill., refinery of the Shell Petroleum Corporation, was a passenger on the French liner Champlain, which left New York City, July 27, for Plymouth and Havre.

R. H. THOMAS, division manager, southern division, Mid-Continent Petroleum Corporation, has been attending a meeting of division managers of the marketing department at the Edgewater Beach Hotel, Chicago.

DR. J. A. ALLAN, head of the geological department of the University of Alberta, is heading a provincial geological expedition which will work in southern Alberta south of the surveys being conducted by the federal government.

RALPH B. LLOYD, who has been chairman of the California Central Proration Committee for several years, has resigned to devote more time to his personal interests and because of his belief that a reorganization of the committee would prove beneficial. The committee has accepted his resignation with regret as those who have worked with him on the committee and as members of the Oil Producers Sales Agency recognize his efforts.

A. L. ROBINSON, vice president and general manager of the Forest Producing Corporation, has arrived in Nowata, Okla., from Bradford, Pa., to take charge of the company's operations in Oklahoma. The company is a subsidiary of the Forest Petroleum Corporation and recently purchased a large block of producing property in the Coody's Bluff area in Nowata County which will be subjected to flooding operations.

HARRY S. BROWN, who has been an official of the Foster Wheeler Corporation for some time, has been elected president of the company. He succeeds J. J. BROWN who has been president and chairman of the board of the company. He will continue as chairman of the board. DAVID McCULLOCH was elected executive vice president of the company. Other vice presidents are WALTER F. KEENON, JR., GEORGE B. FERRIER and J. J. NELLS.

FRED VAN COVERN has resumed his duties as director of the Department of Statistics of the American Petroleum Institute, and again is occupying his office in the Institute's headquarters at New York. For some time Mr. Van Covern has been in Washington, D. C., where he directed the staff of statistical Subcommittee "A" of the Planning and Coordination Committee. He was also assistant treasurer of the committee. JOSEPH BUDER, who accompanied Mr. Van Covern to Washington as assistant, returned with him to the staff of the Institute's Department of Statistics.

CHESTER CRAWFORD, of the Socony-Vacuum Oil Company, Inc., arrived in New York Monday, July 29, from Europe on the Normandie of the French line.

O. D. DONNELL, president of Ohio Oil Company, with his son, JAMES C. DONNELL, vice president of the Illinois Pipe Line Company (an Ohio subsidiary), were Tulsa visitors last week.

MR. and MRS. C. E. WEST and daughter, BEVERLY, with MRS. CECIL CLUCK have returned to Coffeyville, Kans., from Petrolia, Ontario, where Mr. West spent the past nine months as construction engineer on the new unit of the Canadian Oil Companies, Ltd., refinery.

DR. HARRY KAUFFMAN, chief surgeon of the Standard Oil Company of New Jersey, and DR. CAMPBELL HOWARD, of the same company, are en route to Europe. They will attend international meetings of the medical fraternity which are being held in Europe during August.

JOHN J. CUNNINGHAM, of Rochester, N. Y., has been appointed local manager for the Tide Water Oil Company at Amsterdam, N. Y., according to announcement by JOHN D. COLLINS, general sales manager. Mr. Cunningham succeeds C. S. BLYTHE, of Amsterdam, who has been sent to Rochester to take charge of the operating phases of the entire Tide Water territory between Rochester and Buffalo.

Gasoline Firm in Group 3, But Feeling Grows That Runs Must Be Lower

By T. F. SMILEY

Conviction is growing among analysts of the gasoline market in the Oklahoma (Group 3) area that refiners will commit a serious blunder if they assume the present encouraging conditions will continue of their own momentum. While it is conceded the heavy seasonal demand which has set in is likely to take care of increased runs to stills for the time being, it will be necessary for refiners to impose restrictions upon themselves in line with the cut in crude allowables in Texas and the prospective cut in Oklahoma if they are to keep the ground they have gained since last February.

Whipping Code Into Shape

On Thursday of this week the group of refiners, jobbers, marketers and dealers who have been formulating a marketing code under the guidance of C. E. Arnott, were to submit their report in New York to the directors of the American Petroleum Institute, at whose request the code was framed. It is understood the new code as drafted omits certain provisions that were in the old one, such as the lease and agency agreement and the furnishing of equipment to distributors by refiners.

If the revised code receives the approval of the Institute directors it will be submitted to the industry at large. If the industry ratifies it, it will be placed in the hands of the Federal Trade Commission for an opinion as to its legality.

By this procedure it is expected self-imposed regulations to take the place of those under the NRA invalidated by the Supreme Court last May will be adopted. Such regulations, however, cannot deal with refinery runs, and unless these are kept strictly in line with consumer demand by the individual refiners it is not likely any marketing code can be effective as a stabilizing agency.

Although the reduction in stocks of finished gasoline in the last five months has followed closely that recorded in the same period last year, the crude runs to stills have been larger. Only high consumption has made decreases in stocks possible. It is declared that gasoline inventories should be cut down sharply now so that when consumption begins to dwindle with the closing days of the vacation season next month there will be less danger of distress accumulations as the trade adjusts itself to the diminished fall and winter needs.

Refined Oil Market Barometer

With the vacation season now in full swing the heavy demand for gasoline virtually removes all danger of distress accumulations. Announcement of the new marketing code following action on it by the A. P. I. directors is awaited with interest. Farseeing observers urge cuts in refinery runs as necessary to preservation of the market's healthy condition.

MID-CONTINENT. Refinery and natural gasoline gaining. Lubricants slightly improved.

EAST COAST. Gasoline more buoyant and prices up. Kerosene and furnace oils inactive.

GULF COAST. Gasoline firm. Market generally dull, with no price changes.

PENNSYLVANIA. Gasoline off, but movement good. Bright stocks stronger.

CALIFORNIA. Market technically stronger, reflecting tightening of production and new curtailment plans.

CHICAGO. Gasoline demand heavy, prices firm. Burning oils slow.

Uneasy Over New Pools

East Texas is now so well in hand that in the minds of some observers it presents less of a market threat than do recent discoveries of new oil pools. Concern especially is expressed over developments in North Louisiana, where much new drilling is under way or planned, particularly in the Rodessa area. Although the depth of the pay in this region is greater than that in East Texas, with correspondingly higher drilling and production costs, the activity reported stirs misgiving.

Jobber buying in the Oklahoma territory was brisk this week, with little disposition on the part of refiners in any quarter to shade tank car prices.

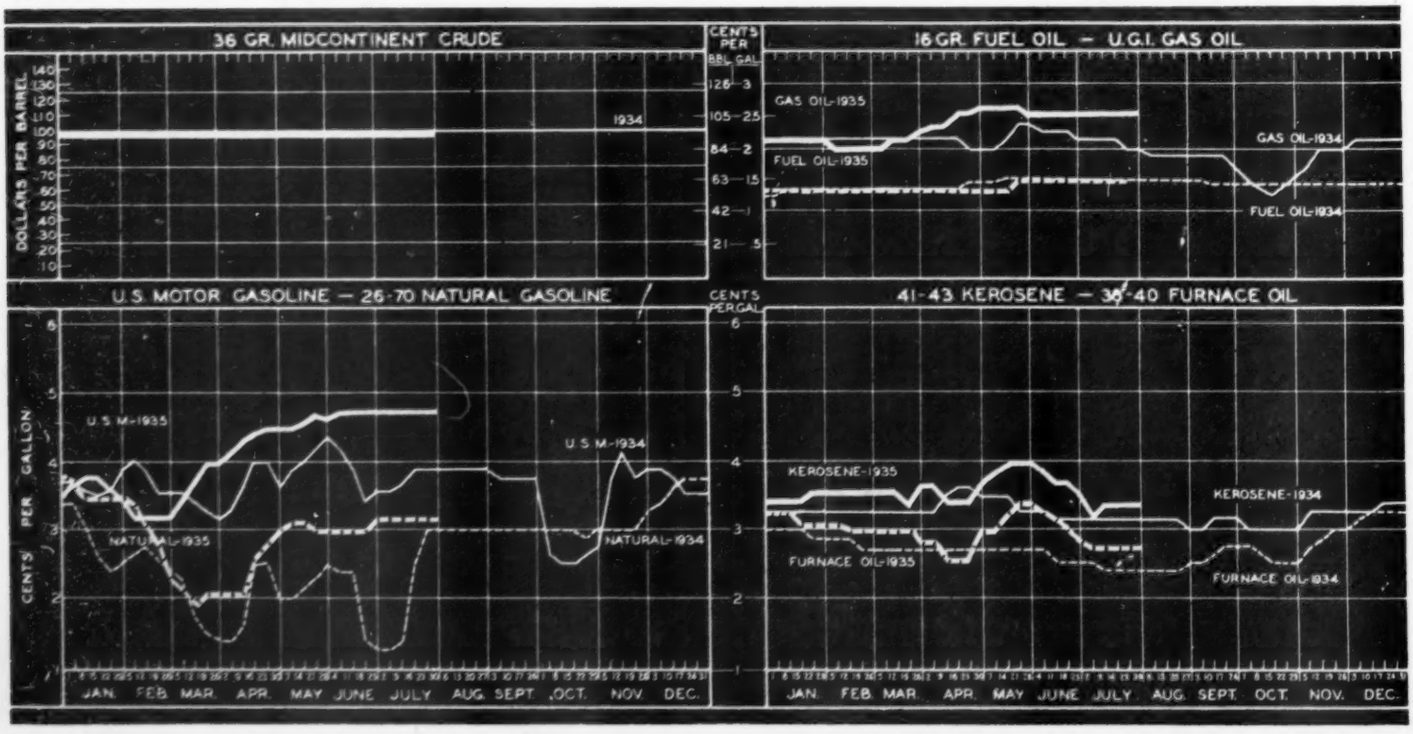
Natural Gasoline Advancing

Natural gasoline continued its advance to firmer ground. Although there were no changes in quotations there was more spirited buying with perhaps some contraction in sources of supply. Material that had been held in storage was being drawn on and the expected reduction in the natural gas output from the Texas Panhandle was a factor in the increasingly buoyant market. It was predicted that before the close of August prices would begin to step up.

Lubricant Inventories Down

Lubricants were steady, with stocks getting low, but conditions which have prevented lubricant prices from reaching a more profitable level in Pennsylvania have inevitably served to depress Oklahoma prices too. Although from the viewpoint of inventories the bright stock situation in Oklahoma is better now than it has been in years, refiners are unable to reap financial benefit from it because they are held to quotations fixed by conditions in a distant area over which they have no control.

Kerosene was exhibiting a better tone this week, along with the lighter distillates. The improved situation in kerosene was accounted for in part by the fact that growing stocks of this material in East Texas resulted in shading of prices, with the result that large quantities of it were bought and moved to the Gulf for coastwise or export shipment. Thus taken off the northern market, it left a better demand for the Oklahoma product. Furnace oils, it was said, were being bought for storage against next fall's needs.



Price Advances Create More Cheerful Feeling in Eastern Gasoline Trade

By C. O. WILLSON

NEW YORK, July 29.—An advance in posted dealer and station prices at several important consuming points in New York State and New England last week brought a better feeling into the gasoline market generally in this territory. The advances effective on July 25 included a half cent increase in posted dealer and 1 cent in retail station prices in metropolitan New York with the exception of Staten Island, Providence, R. I., and Boston. Posted dealer prices were advanced one-fourth cent and station prices one-half cent in Maine. No changes were made in tank car prices except in Maine where schedules were advanced one-half cent at points where prices are posted.

The new prices in the largest part of metropolitan New York are 15.05 cents for divided dealer accounts and 19.3 cents service station including taxes with the prices in Brooklyn and Queens, 14.8 cents dealer and 18.8 cents station. The new prices in Boston are 13 cents dealer and 16.5 cents station. At Portland, Me., the dealer price is 14.75 cents and station 18.5 cents. It is now said that New England station prices are considered normal except in Boston which is still 1 cent below the general market for that territory. It is also said that the New York City station price of 19.3 cents including 5-cent state and federal taxes is normally based on the present crude oil market.

Increased Margins

Since the tank car prices in New York Harbor area were not changed the advances in effect increase margins to jobbers and dealers. The latter at many points are now receiving 4 cents on divided accounts and 4½ cents on undivided. Previously they had been one-half cent lower. The jobber buying on an open tank car basis has had his margin increased 1 cent. Actually the bulk of the gasoline in the New York Harbor section is not sold on an open tank car basis. Considerable quantities are sold on yearly contracts with certain minimum guarantees in regard to differentials with buyer and seller splitting differentials in excess of a certain amount.

In these cases and in the case of the dealer business of large companies the netback to refineries and water terminals will be greater than it was and to that extent the refinery tank car has been aided. It is also felt that the increases have ended temporarily at least a tendency to shade tank car prices on a few sales. This tendency has been apparent since the first of the month, reflecting the uncertainty regarding the general oil situation more than any special weakness in the market for motor fuels. Gasoline consumption continues heavy throughout the Atlantic Seaboard territory and it is expected that this condition will continue through August.

Despite bearish reports from the Mid-Continent and the Gulf Coast, the Gulf Coast market on gasoline for coastwise movement appears to be steady. There have been reports that prices were being shaded one-eighth to one-fourth cent on middle octane and high octane material, but it has been impossible to check any actual sales. Prices of 5¼ cents and 5⅜ cents for middle octane and 65 octane plus material at the Gulf if they continue will certainly support the present quotations of 5¾ and 6 cents in the New York Harbor area for the same grade material. Some observers, due to this comparatively narrow margin, were surprised that tank car quotations were not advanced one-fourth cent last week when the higher dealer and station prices were made effective.

The advance in retail gasoline prices of the last week are in line with contentions frequently heard in this territory that consumer prices on gasoline and some of the other petroleum products have not been advanced in line with the base schedules still in effect on crude oil in the Mid-Continent. The need of these higher prices has been apparent from the second quarter and half-year earnings statements of three important refining and marketing units operating in this territory. These statements varied from small net profits to substantial losses. In all cases the companies buy a substantial part of their crude oil supplies and cannot look to profits in the production and transportation ends to offset losses in refining and marketing operations.

One oil company executive predicts that unless these higher gasoline retail prices are supported and maintained with better prices in some of the other products, lower crude oil schedules will result. He is of the opinion that important figures in the refining and marketing factors will not continue indefinitely to maintain a crude price structure which is not supported by refinery and retail prices. It is said that this viewpoint has been made known to those whose principal interest lies in the maintenance of present crude oil schedules including state authorities in charge of state allowables who do not look with favor on lower crude oil prices, which mean lower revenues. Reductions promised for August in Mid-Continent states indicate that the present critical situation is realized and efforts will be made to correct the situation from the crude oil end.

It also is contended that any decrease in the crude oil production division should be carried on to refinery operations. Reduced plant operations would not only help gasoline but there are other refinery products which could stand reduced supply over a period of several weeks. In this territory the furnace oil and kerosene markets are unsatisfactory both in the tank car and tank wagon divisions. Various reasons are assigned for conditions, but there is reason to believe that the solution would be much easier if supplies were reduced and some sellers were not constantly forced to give concessions to buyers in order to move surplus material. The same situation applies to the paraffin wax and lubricating oils although these more or less by-product divisions of manufacturing are not as directly related to crude runs to stills as in the case of the light oil and the residual products.

Kerosene

The spot kerosene market is inactive with the 41-43 water white grade offered over a price range of 4⅞ to 5 cents in tank car shipments and one-eighth cent less in barges. This market should show seasonal activity starting with the next two weeks.

Some observers believe that both the kerosene and furnace oil markets will show substantial improvement over the next month and surprise the trade which considers these products unsatisfactory due to the inactivity of the past several weeks. Tank car prices range from 3½ cents for No. 4 furnace oil to 5 cents for No. 1, including range oils.

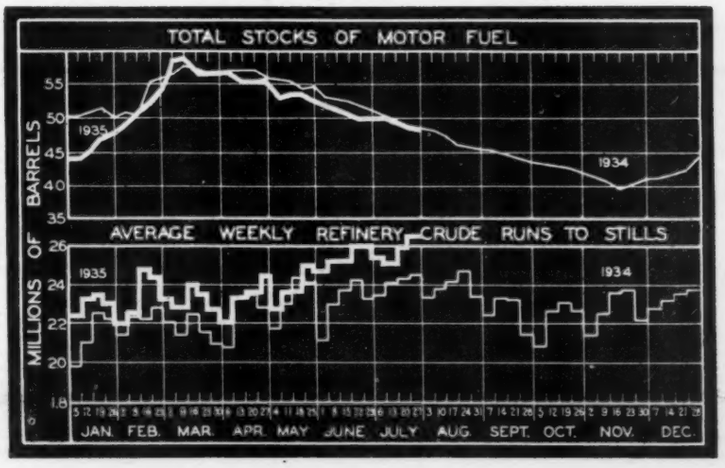
No changes were reported in the Diesel oil, gas oil and fuel oil markets. No special activity in sales was reported, but prices appeared steady. One large seller says that contract business to the marine trade on bunker fuels has improved since the recent reduction in Bunker C from $1.15 to $1.05 per barrel. He predicts an improvement this fall over last fall in the industrial and heating demand for low gravity fuels.

Trading in this territory appears particularly dull in lubricants and wax.

American Petroleum Institute Weekly Refinery Statistics

Week Ending July 27, 1935

	Capacity reporting per cent	Daily crude runs (bbls.)	Finished motor fuel (bbls.)	Gas oil and fuel oil (bbls.)
East Coast	100.0	507,000	15,245,000	12,409,000
Appalachian	94.8	111,000	2,125,000	878,000
Indiana, Illinois, Kentucky	95.9	363,000	9,036,000	5,109,000
Okla., Kans., Mo.	84.8	293,000	5,068,000	4,746,000
Inland Texas	48.5	95,000	1,132,000	1,834,000
Texas Gulf	96.4	588,000	4,883,000	10,943,000
Louisiana Gulf	96.4	116,000	1,091,000	4,097,000
N. La. and Ark.	90.0	40,000	258,000	399,000
Rocky Mountain	61.9	45,000	773,000	802,000
California	92.6	505,000	8,546,000	64,256,000
Total United States	89.5	2,663,000	48,157,000	105,473,000



Chicago Market Firm With Good Demand

CHICAGO, July 29.—The influence of fine motoring weather has overspread the whole middle western gasoline market situation, absorbing all motor fuel which could be classified in the distress category and replacing the somewhat doubtful outlook of a few weeks ago with much more favorable prospects. All available information is that July is proving to be a record-breaking month in gasoline demand.

Kerosene remains slow and dull, as might be expected at this season. It appears to be near the end of its decline. Stocks are not very heavy at this time.

Heating oils likewise are featureless, but also have shown more steadiness. Some distributors have placed orders for part of winter needs. East Texas offerings have been continuing recently.

Prices for heavy fuels and gas oils show no change but are firm.

Lubricants are in fairly good tone, despite a certain amount of spottiness.

Wax has turned quite dull, with an undertone that is not very firm.

Solvents and naphthas remain quiet.

Despite the summer period, petroleum coke is holding its own.

Crude Oil Prices

Oklahoma, Kansas, North Central and East Central Texas

Corsicana (heavy) (June 17, 1933)	.80
East Texas	$1.00
Other fields	(See gravity table)

West Texas

Crane, Upton, Crockett, Howard, Glasscock, Mitchell (Sept. 29, 1933)	$ .70
Ector, Winkler and Pecos Counties and Lea County, New Mexico (sept. 29, 1933)	.75
Pecos County, Yates shallow Pool (Sept. 29, 1933)*	.65
Jones and Fisher Counties*	(See gravity table)

South Central and Southwest Texas

(See note below table)

Darst Creek	$ .87
Mirando (June 29, 1935)	.75
Luling (Sept. 29, 1933)	.75
Pettus	1.05
Salt Flat	.87
Lytton Springs (Sept. 29, 1933)	.95
Duval County (Sept. 29, 1933)	.80
Saxet (June 29, 1935)	.90

North Louisiana and Arkansas

Smackover, Ark. (all grades)	$ .70
Tullos, Urania, La. (Jan. 15, 1934)	.87
Nevada, Ark. (Sept. 29, 1933)	.60
East El Dorado (Sept. 29, 1933)	.70
Converse, La. (Mar. 17, 1934)	1.03
Elm Grove, La. (Sept. 29, 1933)	.75
Holly, La. (Nov. 17, 1934)	1.03
Pleasant Hill, La. (Mar. 17, 1934)	1.03
Zwolle, La. (Mar. 17, 1934)	1.03
Champagnolle, Ark. (Mar. 17, 1934)	.81
Lisbon, Ark (Mar. 17, 1934)	1.03
Stephens, Ark. (Sept. 29, 1933)	.70
Urbana, Ark. (Mar. 17, 1934)	.60
Other fields	(See gravity table)

Rocky Mountain States

Ilea, light (Sept. 29, 1933)	$ .96
Ilea, heavy (Sept. 29, 1933)	.90
Florence, Colo. (June 17, 1933)	.80
Fort Collins and Wellington, Colo. (June 17)	(See Salt Creek prices)
Big Muddy (Sept. 29, 1933)	$1.01
Frannie, light (May 1, 1934)	.70
Frannie, heavy (Sept. 29, 1933)	.62
Salt Creek and LaBarge (Sept. 29, 1933)	(See Stanolind Mid-Continent price schedule)
Grass Creek, light (Sept. 29, 1933)	$1.18
Grass Creek, heavy (Sept. 29, 1933)	.62
Elk Basin (Sept. 29, 1933)	1.18
Rock Creek (Sept. 29, 1933)	1.02
Lance Creek (Dec. 16, 1932)	.92
Hudson (June 2, 1931)	.85
Lost Soldier (Sept. 30, 1933)	.88
Hamilton Dome, all grades (Feb. 16, 1935)	.57
Torchlight (Sept. 29, 1933)	1.18
Greybull (Sept. 29, 1933)	1.18
Pondera (Sept. 29, 1933)	1.25
Sunburst (July 19, 1935)	1.20
Cat Creek, Montana	1.07
Hogback (Sept. 29, 1933)	1.11
Lea County, N. Mex. (Sept. 29, 1933)	.75
Maljamar (Sept. 29, 1933)	.70
Artesia-Jackson (Dec. 1, 1933)	.75

Gulf Coast

Grade A and Grade B specification discontinued by leading buyers. (See gravity table)

Tomball (see note)*	$1.10
Livingston (Sept. 29, 1933)†	1.00
Cleveland (Jan. 11, 1934)	1.00
Greta (Sept. 29, 1933)	.85
Refugio, light	(See gravity table)
Refugio, heavy (June 29, 1935)‡	.80
Markham and High Island	(See Gulf Coast gravity table)
Conroe	(See Conroe gravity table)
Bosco, La. (Jan. 18, 1935)§	$ .90

Note—Tomball, effective September 29, by Humble Oil & Refining Co. and October 2 by Magnolia Petroleum Co., and November 10 by Stanolind Crude Oil Purchasing Co.

*Greta posted by Texas Co. †Shell Petroleum Corp. ‡Refugio heavy by Humble Oil & Refining Co. Cleveland (Liberty County) posted by Magnolia Petroleum Co. §Bosco posted by Pure Oil Co.

Middle Western States

OHIO OIL CO

Lima (Feb. 1, 1935)	$1.15
Illinois (Jan. 5, 1934)	1.13
Princeton, Ind. (Jan. 5, 1934)	1.13
Plymouth	Shut in
Midland, Mich. (Sept. 30, 1933)*	$1.02
West Branch, Mich.	.86
Oceana, Mich (Oct. 5, 1933)	.90
Somerset, Ky. (May 20, 1935)	1.13
Western Kentucky (May 22, 1935)	1.13

*Posted by Pure Oil Co. and Simrall Pipe Line Co. Producers Pipe Line Co. pays 5 cents per barrel over Pure Oil Co.'s posted prices. West Branch, Mich., posted by Simrall Pipe Line Co. Somerset, Ky., crude purchased by Ashland Refining Co. Ashland, Ky., and posted prices includes premium. Oceana posted by Old Dutch Refining Co. and Naph-Sol Refining Co.

Eastern States

TIDE WATER PIPE CO.
(Effective July 16, 1935)

Bradford, Pa.	$1.95
Allegany, N. Y.	1.95

SOUTH PENN OIL CO.
(Effective July 16, 1935)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field)	$1.93
Pennsylvania Grade Oil in Southwest Pennsylvania Lines	1.67
Pennsylvania Grade Oil in Eureka Pipe Line lines	1.62
Pennsylvania Grade Oil in Buckeye Pipe Line lines	1.52
Corning Grade Oil in Buckeye Pipe Line Co.'s lines	1.32

PENNZOIL CO.
(Effective July 16, 1935)

Pennsylvania Grade Oil in National Transit Lines:	
Group A	$1.92
Includes Cochran, Franklin, Hamilton and Doolittle districts.	
Group B	1.91
Includes Titusville district.	
Group C	1.90
Includes Turkey and Tidioute districts.	
Group D	1.89
Includes Bear Creek and Porkey districts.	
Group E	1.86
Includes Eldeneau, Bull Creek, Rough Run, Carbon, Dipner, Bredlin, McJunkin, Jameson, Kennerdell, Emlenton, Tiona, Lacey and Kinzua districts.	

Price depends on length of pipe line haul to plant at Oil City.

PURE OIL CO
(Effective July 16, 1935)

Cabin Creek, W. Va.	$1.62
Bradford Hollow, W. Va.	1.62
Kelly Creek, W. Va.	1.62

Canada

Ontario (Sept. 9, 1933):	
Petrolia*	$2.10
Oil Springs	2.17
Turner Valley (May 31, 1934):†	
Clear naphtha	2.55
Discolored naphtha	2.37
Crude oil, 50 gravity	2.19
Crude oil, 45 to 49.9	2.07
Crude oil, 40 to 44.9	1.50

*Imperial Oil, Ltd. †Imperial Oil, Ltd., and Regal Oil & Refining Co.

Mexico

Panuco*	$.955

*F.o.b. ship, based on May transactions and exclusive of production and export taxes and bar dues.

Crude Oil Gravity Prices

Gravity—	Oklahoma and Kansas 1	North Texas, Central Texas and East Central Texas 2	North Louisiana and Arkansas 3	Gray County, Texas 4	Carson, Hutchinson and Moore Counties, Texas 5	Conroe, Texas 6	Salt Creek, Wyo. 7	Gulf Coast, Texas and Louisiana 8	Gulf Coast, Texas and Louisiana 9	Cotton Valley, Louisiana 10
Below 20	....	....	....	....	....	....	....	$.82	$.82	....
20-20.9	....	....	....	....	....	....	....	.84	.84	....
21-21.9	....	....	....	....	....	....	....	.86	.86	....
22-22.9	....	....	....	....	....	....	....	.88	.88	....
23-23.9	....	....	....	....	....	....	....	.90	.90	....
24-24.9	....	....	....	....	....	....	....	.92	.92	....
Below 25	*$.76	....	....	....	....	....	....	....	....	$.70
25-25.9	*.78	....	....	....	....	....	....	.94	.94	.72
26-26.9	*.80	....	....	....	....	....	....	.96	.96	.74
27-27.9	*.82	....	....	....	....	....	....	.98	.98	.76
28-28.9	*.84	....	....	....	....	....	....	1.00	1.00	.78
Below 29	.84	$.79	$.79	....	....	....	$.84	....	....	....
29-29.9	.86	.81	.81	....	....	....	.86	1.02	1.02	.80
30-30.9	.88	.83	.83	....	....	....	.88	1.04	1.04	.82
31-31.9	.90	.85	.85	....	....	....	.90	1.06	1.05	.84
32-32.9	.92	.87	.87	....	....	....	.92	1.08	1.06	.86
33-33.9	.94	.89	.89	....	....	....	.94	1.10	1.07	.88
34-34.9	.96	.91	.91	....	....	....	.96	1.12	1.08	.90
Below 35	....	....	....	$.79	$.69	....	....	....	....	....
35-35.9	.98	.93	.93	.81	.71	$1.09	.98	1.12	1.09	.92
36-36.9	1.00	.95	.95	.83	.73	1.11	1.00	1.12	1.10	.94
37-37.9	1.02	.97	.97	.85	.75	1.13	1.02	1.12	1.11	.96
38-38.9	1.04	.99	.99	.87	.77	1.15	1.04	1.12	1.12	.98
39-39.9	1.06	1.01	1.01	.89	.79	1.17	1.06	1.12	1.13	1.00
40 and over	1.08	1.03	1.03	.91	.81	1.19	1.08	1.12	1.14	1.02

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA

For current purchases of crude oil at the well (unless otherwise specified). (All gravities above these quoted take highest price offered in that field.)

(Effective September 6, 1933)

Gravity—	Long Beach	Seal Beach, Alamitos Heights	Huntington Beach	Inglewood	Playa del Rey	Olinda, Brea Canyon	Athens-Rosecrans	Torrance	Richfield	Whittier, La Habra	Montebello	Santa Fe Springs La Habra-Coyote		Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Coalinga	Coyote	Mountain View	Elwood Terrace	Newhall, McKittrick, Kern River	Wheeler Ridge	Kettleman Hills	Shiells Canyon, South Mountain, Santa Paula
14-14.9	$.65	$.65	$.65	$.65	$.65	$.65	....	$.65	$.65	$.65	$.65	....	$.65	$.57	$.57	$.57	$.65	$.57	....	$.57	$.57	....	$.57
15-15.9	.65	.65	.69	.69	.66	.69	....	.66	.65	.65	.65	....	.65	....	....	....	.65	.57	....	.57	.57	....	.57
16-16.9	.66	.65	.72	.72	.69	.72	....	.69	.67	.68	.65	....	.65	....	....	....	.65	.57	....	.57	.57	....	.57
17-17.9	.69	.65	.75	.76	.72	.76	....	.72	.70	.71	.65	....	.68	....	....	....	.68	.57	....	.57	.57	....	.57
18-18.9	.72	.65	.78	.80	.76	.79	....	.75	.74	.74	.65	....	.71	.61	.61	.69	.71	.57	....	.57	.58	....	.60
19-19.9	.75	.65	.81	.83	.80	.82	....	.78	.78	.78	.65	....	.74	.64	.65	.62	.74	.57	....	.57	.61	....	.63
20-20.9	.78	.68	.83	.87	.83	.85	....	.81	.82	.81	.66	....	.78	.67	.69	.65	.78	.58	....	.57	.64	....	.66
21-21.9	.81	.72	.86	.90	.87	.88	....	.83	.85	.84	.69	$ .72	.81	.70	.73	.68	.81	.59	....	....	.67	....	.69
22-22.9	.84	.76	.89	.94	.90	.92	....	.85	.89	.87	.72	.76	.84	.72	.76	.72	.84	.61	....	....	.70	....	.72
23-23.9	.88	.81	.92	.97	.94	.95	$.83	.89	.92	.90	.76	.79	.87	.77	.79	.75	.87	.63	....	....	.73	....	.75
24-24.9	.91	.85	.95	1.01	.97	.98	.86	.92	.97	.93	.80	.83	.90	.81	.82	.78	.90	.66	....	....	.76	....	.78
25-25.9	.94	.89	.98	....	1.00	1.01	.90	.95	1.00	....	.85	.87	.93	.85	.85	.81	.93	.69	....	....	.79	....	.81
26-26.9	.97	.93	1.01	....	1.04	1.04	.94	.98	1.04	....	.89	.90	.96	.89	.88	....	.96	.72	....	....	....	....	.84
27-27.9	1.00	.98	1.04	....	....	1.07	.97	....	1.08	....	....	.94	.99	.93	.91	....	.99	.75	....	....	....	....	.88
28-28.9	1.03	1.02	1.07	....	....	1.10	1.01	....	1.11	....	....	.98	1.02	.97	.94	....	1.02	.78	....	....	....	....	.92
29-29.9	1.06	1.05	1.09	....	....	....	1.04	....	1.15	..	....	1.01	1.05	1.01	.97	....	1.06	.81	....	....	....	....	.96
30-30.9	1.09	1.10	1.12	....	....	....	1.08	....	....	....	....	1.05	1.09	1.05	1.00	....	1.09	.84	....	....	....	....	1.00
31-31.9	....	....	....	....	....	....	1.12	....	....	....	....	1.08	1.12	1.09	....	....	1.12	.87	....	....	....	....	....
32-32.9	....	....	....	....	....	....	1.15	....	....	....	....	1.12	1.16	1 13	....	....	1.15	.90	....	....	....	....	....
33-33.9	....	....	....	....	....	....	....	....	....	....	....	1.16	1.18	1.17	....	....	1.18	.93	1.03	....	....	.93	....
34-34.9	....	....	....	....	....	....	....	....	....	....	....	1.19	1.21	....	....	....	1.21	....	1 06	....	....	.96	....
35-35.9	....	....	....	....	....	....	....	....	....	....	....	1.23	....	....	....	....	....	....	1.09	....	....	.99	....
36-36.9	....	....	....	....	....	....	....	....	....	....	....	1.26	....	....	....	....	....	....	1.12	....	....	1.02	....
37-37.9	....	....	....	....	....	....	....	....	....	....	....	1.30	....	....	....	....	....	....	1.15	....	....	1.05	....
38-38.9	....	....	....	....	....	....	....	....	....	....	....	1.34	....	....	....	....	....	....	....	....	....	1.08	....
39 and over	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.11	....

PRICES ON REFINED PRODUCTS

All quotations f.o.b. plant in cars for interstate or export movement except as otherwise noted

Prices as of July 30, 1935

The following quotations are exclusive of the federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils.

Refinery Gasoline

OKLAHOMA (Group 3)—
U. S. Motor grades:
Below 63 octane ..... .04¾ .04¾
63-70 octane ..... .05¾ .05¾
60-62 400 grade:
Below 63 octane ..... .04¾ .04¾
63-70 octane ..... .05¾ .05¾
64-66 375 ..... .04¾ .05
68-70 360 ..... .05 .05½

NORTH TEXAS—
U. S. Motor grades:
Below 63 octane ..... .04¾ .04¾
63-70 octane ..... .05¾ .05¾
60-62 400 ..... .04¾ .04¾
64-66 375 ..... .04¾ .05

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
U. S. Motor grades:
Below 63 octane ..... .05½
63-70 octane ..... .06¼
60-62 400 ..... .05½

ARKANSAS (Ark., N. La., Miss. del.)—
U. S. Motor grades:
Below 63 octane ..... .05½
63-70 octane ..... .06¼

CHICAGO (based on Group 3)—
U. S. Motor grades:
Below 63 octane ..... .04¾ .04⅞
63-70 octane ..... .05½ .05¾
60-62 400 ..... .04¾ .04⅞
64-66 375 ..... .04¾ .05
68-70 360 ..... .05 .05½
Aviation fighting grade ..... .05¾ .06

PENNSYLVANIA (inland refineries)—
58-60 U. S. Motor:
Below 60 octane ..... .06
60-64.9 ..... .06¾
65-70 octane ..... .07
64-66 375 ..... .06¼
68-70 350 ..... .06½

CALIFORNIA (domestic movement)—
54-58 U. S. Motor ..... .04¼ .05¼
58-60 400 ..... .05 .06

EAST COAST—
U. S. Motor, below 60 octane:
*New York (Bayonne) ..... .05¾
Baltimore ..... .05¾
U. S. Motor, 60-64.9 octane:
*New York (Bayonne) ..... .06
Philadelphia ..... .06
Boston ..... .06
Baltimore ..... .06
Charleston, S. C. ..... .06
U. S. Motor, 65 and above:
*New York (Bayonne) ..... .06¼
Philadelphia ..... .06¼ .06½
Boston ..... .06¼
Baltimore ..... .06¼
Charleston, S. C. ..... .06¼

*All grades of gasoline one-fourth cent less for small barge shipments.

GULF COAST (domestic)—
U. S. Motor grades:
Below 60 octane ..... .05 .05½
60-64.9 ..... .05¼ .05½
65 octane and higher ..... .05½

Naphtha

PENNSYLVANIA (inland refineries)—
50-52 450 (blending) ..... .05⅞
52-54 450 (blending) ..... .05⅞
54-56 450 (blending) ..... .06

CHICAGO (based on Group 3)—
50-52 450 (blending) ..... .04¾ .05
Cleaners' naphtha, 56-58 gr., 200 i.b.p., 320 e.p. ..... .06¾ .07
Lacquer diluent, 180 i.b.p., 250 e.p. ..... .07¾ .08
Lacquer diluent, 140 i.b.p., 200 e.p. ..... .08¾ .09
Rubber solvent, 68-70 gr., 100 i.b.p., 300 e.p. ..... .06¾ .07
Stoddard solvent, 300 i.b.p., 410 e.p., over 83° flash ..... .06¾ .06½
Pet. thinner, 290-300 i.b.p., 410 e.p., over 83° flash ..... .06¾ .06½
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p., 330 e.p. ..... .06¾ .07
Petroleum spirits ..... .05¾ .06

Natural Gasoline

OKLAHOMA (Group 3)—
Grade 26-70 ..... .03¼
Grade 18-55 ..... .03¾
Low vapor pressure grade:
14 lb. v.p. (max.) ..... .04¼ .04½
12 lb. v.p. (max.) ..... .04¾ .04¾

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
Grade 26-70 ..... .03¼ .03¾

NORTH TEXAS—
Grade 26-70 ..... .03
Grade 18-55 ..... .03¾
Low vapor pressure grade:
*14 lb. v.p. (max.) ..... .04¼ .04¾
*12 lb. v.p. (max.) ..... .04¾

*Nominal.

CALIFORNIA—
75-85 375-390 ..... .04¾ .05½

Kerosene

(All kerosene water white)

OKLAHOMA (Group 3)—
41-43 ..... .03¾ .03½
42-44 ..... .03¾ .03¾

NORTH TEXAS—
41-43 ..... .03¼

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
41-43 ..... .03¾

ARKANSAS (Ark., N. La., Miss. del.)—
41-43 ..... .03¾

PENNSYLVANIA (inland refineries)—
45 ..... .04¾ .04¾
46 ..... .04¾ .04¾
47 ..... .04¾ .05

CHICAGO (based on Group 3)—
41-43 ..... .03¼ .03⅜
42-44 ..... .03⅜ .03½

CALIFORNIA (Pac. Coast market)—
38-40 high burning test ..... .03¼ .04½

NEW YORK (Bayonne, N. J.)—
41-43 ..... .04¾ .05

GULF COAST (domestic)—
41-43 ..... .04¼ .04½

Petroleum Coke

(Prices per ton f.o.b. refineries in Chicago area. Refineries absorb freight to 80 cents a ton.)

Pile run 6.00
Direct from still 7.00
Egg, nut, pea 8.00
Lump 8.50

Furnace Oil

OKLAHOMA (Group 3)—
No. 1 prime white, 38-42 ..... .03 .03½
No. 1 straw, 38-40 ..... .02¾ .03
No. 2 straw, 32-36 ..... .02¾ .02¾
No. 2 dark, 32-36 ..... .02½ .02¾
No. 3, 28-32 ..... .02¾ .02¾
No. 3, 15 and above, 28-32 ..... .02¼ .02¾

NORTH TEXAS—
No. 1 prime white, 38-42 ..... .02¾ .03¼
No. 1 straw, 38-40 ..... .03 .03¼

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
No. 2, 32-36 ..... .02¾

ARKANSAS (Ark., N. La., Miss. del.)—
No. 2, 32-36 ..... .03½
No. 3, 28-32 ..... .03

CHICAGO (based on Group 3)—
No. 1 prime white, 38-40 ..... .02¾ .03
No. 1 straw, 38-40 ..... .02¾ .02¾
No. 2 straw, 32-36 ..... .02¾ .02¾
No. 2 dark, 32-36 ..... .02½ .02¾
No. 3, zero to 15, 28-32 ..... .02¾ .02½
No. 3, 15 and above, 28-32 ..... .02¼ .02¼

NEW YORK (Bayonne, N. J.)—
No. 1 ..... .04¾ .05
No. 2 ..... .03¾ .04
No. 4 ..... .03½ .03⅝

Gas Oil and Fuel Oil

(Gas oil per gal., fuel oil per bbl.)

OKLAHOMA (Group 3)—
U.G.I. gas oil ..... .02½ .02⅝
No. 4, 24-28 ..... .87½ .90
No. 4, 15 and above, 24-28 ..... .75 .80
No. 5 ..... .70 .75
No. 6 ..... .67½ .70
Below 18 fuel oil, industrial ..... .65 .67½

NORTH TEXAS—
U.G.I. gas oil ..... .02½ .02⅝
No. 4, 24-28 ..... .87½ .90
No. 5 ..... .72½ .75
No. 6 ..... .67½ .70
Below 18 fuel oil, industrial ..... .65 .67½

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—
U.G.I. gas oil ..... .02⅝ .02⅝
10-14 fuel oil, industrial ..... .75 .80

ARKANSAS (Ark., N. La., Miss. del.)—
10-14 fuel oil, industrial ..... .60 .65

CHICAGO (based on Group 3)—
U.G.I. gas oil ..... .02¼ .02½
No. 4, 24-28 ..... .85 .90
No. 4, 15 and above, 24-28 ..... .72½ .77½
No. 5, 18-22 ..... .65 .70
No. 6, 10-16 ..... .55 .60

Fuel oils of more than 40 cold test generally 5 to 15 cents per bbl. in these areas.

PENNSYLVANIA (inland refineries)—
36-40 ..... .04¼ .04¼

CALIFORNIA—
Los Angeles:
30-34 gas oil, per bbl. 1.05 1.25
27 plus Diesel 1.05 1.25
27 plus Diesel (bunkers) 1.25 1.30
12-16 (bunkers at tidewater) ..... .87 .95
10-16 (cargo lots) ..... .75 .92
12-17 (tank cars) ..... .60 .95
San Joaquin Valley:
10-18 (tank cars) ..... .55 .75
San Francisco:
27 plus Diesel, per bbl. 1.25
27 plus Diesel (bunkers) 1.35
10-16 (bunkers) 1.00

GULF COAST—
28-30 gas oil ..... .03½ .03⅝
28-30 Diesel (bunkers) 1.70
Bunker C (bulk cargoes) ..... .85 .90
Bunker C (bunkers) ..... .95 1.00

NEW YORK (Bayonne, N. J.)—
27 plus, gas oil ..... .04
28-30 Diesel (lighterage 6⅛ cents per bbl.) 1.65
28-30 Diesel (tank cars) ..... .04
*Bunker C (to ocean-going ships in N. Y. harbor) 1.05
Industrial fuel (tank cars) ..... .03⅝

*Lighterage charge 5 cents per barrel additional.

Neutral Oil

(Vis. at 100° F. except Pennsylvania and color N.P.A.)

OKLAHOMA (Group 3)—
Zero to 10 Cold Test:
150-3 ..... .10
180-3 ..... .11¼
180-4 ..... .10⅝
200-3 ..... .11⅝
200-4 ..... .11¼
240-3 ..... .13⅜
240-4 ..... .13¼
280-3 ..... .14⅝
280-4 ..... .14
300-3½ ..... .15¼
400-4 ..... .17¼
100-2 paraffin oil ..... .05⅜
15-20 Cold Test:
200-3 ..... .10⅝
200-4 ..... .10¼
240-3 ..... .12⅝
240-4 ..... .12¼
280-3 ..... .13⅝
280-4 ..... .13

GULF COAST—
Pale Oils:
200-3 ..... .07 .07½
300-3 ..... .07½ .08
500-3½ ..... .08½ .09
750-3½ ..... .09 .09¼
1,200-3½ ..... .09½ .09⅝
2,000-4 ..... .09⅝ .10
Red Oil:
200-5-6 ..... .07 .07¼
300-5-6 ..... .07¼ .07½
500-5-6 ..... .08 .08½
750 ..... .08½ .09
1,200-5-6 ..... .09¼ .09½

CALIFORNIA (moving to dom. market)
Pale Oils:
100-2½-3 ..... .07½ .07⅝
200-2½-3 ..... .08 .08⅝
300-3-3½ ..... .09 .10
350-3-4 ..... .10½ .11
400-3-4 ..... .12 .12¼
450-3-4 ..... .12½ .12⅝
550-3-4 ..... .13 .13½
600-3-4 ..... .13½ .14
Red Oils:
200-4-5 ..... .08½ .09
300-5-6 ..... .09
350-5-6 ..... .10 .10¼
400-5-6 ..... .10½ .10⅝
450-5-6 ..... .11 .11¼
500-5-6 ..... .11½ .11⅝
600-5-6½ ..... .12 .12⅝
700-6½ plus ..... .13 .13¼
750-6½ plus ..... .13½ .13⅝
900-6½ plus ..... .14 .14½

PENNSYLVANIA—
150 vis. at 70° F., color, 400-405 flash:
Zero pour test ..... .20½ .21
10 pour test ..... .19½ .20
15 pour test ..... .19 .19½
25 pour test ..... .18 .18½
180 vis. at 70° F., 3 color:
20 pour test ..... .21 .21½
200 vis. at 70° F., 3 color:
Zero pour test ..... .25½ .26
10 pour test ..... .24½ .25
15 pour test ..... .24 .24½
25 pour test ..... .23 .23½

Bright and Steam Refined

OKLAHOMA (Group 3)—
Bright Stocks:
190-200 D ..... .18
150-160 D, 0-10 ..... .15
150-160 D, 10-25 ..... .14½
150-160 25-40 ..... .14
150-160 E ..... .14
Steam refined:
630 green (treated) ..... .09½
600 light green, untreated ..... .08½
600 dark green, untreated ..... .05 .06

PENNSYLVANIA—
Bright Stocks (Pennsylvania grade, No. 8 color, 145-50 at 510; 540-550 flash):
10 pour test ..... .20 .20½
15 pour test ..... .19 .19½
20 pour test ..... .18 .18½
25 pour test ..... .17 .17½
Steam refined:
600 ..... .09½ .10
650 ..... .11 .11½
600 Pennsylvania flash ..... .12 .12½
630 flash ..... .17 .17½
600 Warren E filtered ..... .13 .13½

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—
124-126 (a.m.p.) w.c. scale ..... .02 .02¼

PENNSYLVANIA (inland refineries)—
122-124 (a.m.p.) w.c. scale ..... .0210 .0215
124-126 (a.m.p.) w.c. scale ..... .0215 .0220

NEW YORK—
Wax in bags fully refined:
123-125 (a.m.p.) wax ..... .0420
125-127 (a.m.p.) wax ..... .0430
128-130 (a.m.p.) wax ..... .0455
130-132 (a.m.p.) wax ..... .0470
133-135 (a.m.p.) wax ..... .0530
135-137 (a.m.p.) wax ..... .0555
124-126 (a.m.p.) w.s. ..... .0200 .0210
124-126 (a.m.p.) y.s. ..... .0200 .0205
Petrolatum in barrels, carload lots:
Dark green ..... .01⅞
Amber ..... .02⅞ .03
Extra amber ..... .03 .03¼
Lily white ..... .06⅝ .06¾
Snow white ..... .07⅝ .07⅞
Cream ..... .05⅝ .05¾

CHICAGO (f.o.b. switching district)*—
122-124 (a.s.t.m.) wax ..... .0440 .0450
125-127 (a.s.t.m.) wax ..... .0465 .0475
127-129 (a.s.t.m.) wax ..... .0480 .0490
130-132 (a.s.t.m.) wax ..... .0540 .0550
132-134 (a.s.t.m.) wax ..... .0565 .0576

*Carload lots in burlap bags of approximately 225 pounds. Add 3° for a.m.p.

Export Prices

GASOLINE

GULF COAST—
U. S. Motor ..... .05
60-62 400 ..... .05 .05⅛
61-63 390 ..... .05 .05⅛
64-66 375 ..... .05¼ .05⅜

LOS ANGELES—
U. S. Motor grades:
53-55 octane ..... .04
55-65 octane ..... .04 .04¼
65-67 octane ..... .04¼ .04½
67-69 octane ..... .04½ .04⅝
Above 69 octane ..... .04⅝ .05
58-60 400 endpoint ..... .04½ .05

KEROSENE

GULF COAST—
41-43 prime white ..... .03⅞
41-43 water white ..... .03⅞ .04
44 water white ..... .04¼

LOS ANGELES—
41-43 water white ..... .04¼ .04⅝

LUBRICANTS

NEW YORK (f.a.s. in bbls.)—
Cylinder Stocks:
600 Warren E ..... .20
600 S.R. unfiltered ..... .16½ .17
650 S.R. unfiltered ..... .18
600 flash S.R. ..... .19 .19½
630 flash S.R. ..... .24 .24½
Bright Stocks:
8 color ..... .24
6½ plus colors in dilution ..... .23

NEUTRAL OIL

200-3 color ..... .28 .30
150-3 color ..... .23 .25

PARAFFIN WAX

NEW YORK (prices per pound)—
123-125 a.m.p. ..... .03625
125-127 a.m.p. ..... .0375
128-130 a.m.p. ..... .0400
130-132 a.m.p. ..... .0425
133-135 a.m.p. ..... .0475
135-137 a.m.p. ..... .05
Crude scale:
124-126 w.s. ..... .0200 .0205
124-126 y.s. ..... .019 .02

RETAIL OIL MARKETS

Tank wagon and filling station prices on gasoline and kerosene furnished by the larger marketing firms

Prices as of July 30, 1935

Taxes

The gasoline quotations given in the following tables include the 1-cent federal tax, as well as state, county and city taxes. The gasoline is the regular or standard grade. In most areas a third grade and a premium grade are also available.

Discounts

Under the standard form of commercial consumer contract which went into effect March 1, 1934, save in California, Oregon, Washington, Arizona and Nevada, a discount of 1 cent a gallon off tank wagon or 3 cents a gallon off retail prices is permitted for purchases between 4,000 and 10,000 gallons per month, or 4 cents a gallon off retail prices for purchases in lots of more than 10,000 gallons a month. The minimum delivery is 25 gallons.

Standard Oil Co. (Indiana)

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Chicago	15.5	17.5	4.0	9.8
Decatur, Ill.	15.5	16.5	4.0	9.8
E. St. Louis	15.2	17.2	4.0	9.5
Joliet	15.5	17.5	4.0	9.8
Peoria	15.5	16.5	4.0	9.8
Quincy	15.2	17.2	4.0	8.0
Davenport, Ia.	15.5	(†)	4.0	9.8
Des Moines	15.3	(†)	4.0	9.6
Mason City	15.7	(†)	4.0	10.0
Sioux City	15.5	(†)	4.0	9.8
Duluth, Minn.	16.3	18.3	4.0	10.6
Mankato	15.9	16.9	4.0	10.2
Minneapolis	15.9	15.9	4.0	10.2
LaCrosse, Wis.	16.9	18.9	5.0	10.2
Green Bay	17.2	19.2	5.0	10.5
Milwaukee	16.3	17.8	5.0	10.1
Madison	16.9	18.9	5.0	10.2
Detroit, Mich.	15.2	16.7	4.0	9.3
Grand Rapids	16.6	18.6	4.0	10.5
Saginaw	16.8	18.8	4.0	9.3
Evansville, Ind.	17.2	19.2	5.0	10.3
Indianapolis	17.4	19.4	5.0	10.5
South Bend	17.6	19.6	5.0	12.6
Fargo, N. Dak.	16.9	18.9	4.0	11.2
Huron, S. Dak.	17.4	19.4	5.0	10.7
Sioux Falls	16.9	18.9	5.0	10.2
Kan. City, Mo.*	14.9	16.9	4.0	9.2
Springfield	14.6	16.6	4.0	8.9
St. Louis	15.2	17.2	3.5	9.5
St. Joseph*	14.9	16.9	4.0	9.2
Wichita, Kans.	14.4	15.0	4.0	6.3
Bartlesville, Okla.	16.0	18.0	5.0	8.8

*State tax 2 cents, 1-cent city tax and 1-cent federal tax.

†Standard Oil Co. (Indiana) has leased all service stations in Iowa.

Discounts to dealers: Undivided accounts, 1½ cents on premium and regular and 2½ cents on third grade off service station prices; divided accounts one-half cent less than undivided. Discounts to dealers in metropolitan Chicago one-half cent larger than rest of Standard of Indiana territory, namely 4 cents and 3 cents on respective grades. Where prices are more than 1 cent below normal, the discounts are one-half cent less than above.

Stanolex Furnace Oil in Chicago

Effective June 27, 1935, f.o.b. Chicago tank wagon prices: Range oil, less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons and more, 7.0 cents. No. 1 (36-40 lt. stw. zero), less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons or more, 7.0 cents; No. 2 (30-34, stw. zero), same prices and quantities as No. 1; No. 3 (22-26, zero), less than 150 gallons, 7.2 cents; 150 gallons or more, 6.2 cents. No. 4 (12-16 zero), less than 400 gallons, 7.2 cents; 400 gallons or more, 6.2 cents, viscosity of No. 4, 85 and 100° F.; No. 5, less than 400 gallons, 5⅝ cents; 400 gallons or more 4⅝ cents.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Denver, Colo.	18.0	20.0	5.0	13.0
Pueblo	18.0	20.0	5.0	13.0
Grand Junction	20.5	22.5	5.0	15.0
Casper, Wyo.	18.5	20.5	5.0	11.5
Cheyenne	18.5	20.5	5.0	13.0
Butte, Mont.	21.0	23.0	5.0	17.5
Billings	18.5	20.5	6.0	16.5
Helena	21.0	23.0	6.0	17.5
Great Falls	20.5	22.5	6.0	17.5
Salt Lake, Utah	21.0	23.0	5.0	16.0
Twin Falls, Ida.	23.0	25.0	6.0	18.0
Boise	23.5	24.5	5.5	18.0
Albuquerque, N. M.	20.0	22.0	*6.5	13.0

*One-half cent city tax.

Effective March 1, 1934, discount to dealers with or without contract throughout Continental territory: Undivided dealer discount off service station price, 4 cents; divided dealer accounts, 3½ cents.

Southern District

STANDARD OIL CO. OF KENTUCKY

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Atlanta, Ga.	19.0	21.0	7.0	12.0
Augusta	19.0	20.0	7.0	13.0
Macon	19.5	21.0	7.0	13.0
Savannah	18.5	20.5	7.0	14.0
Birm'ham, Ala.	21.0	23.0	8.0	12.0
Mobile	20.0	22.0	8.0	11.0
Montgomery	22.0	24.0	8.0	13.5
Jackson, Miss.	19.0	21.0	7.0	11.0
Vicksburg	18.5	20.0	7.0	12.0
Jacksonville, Fla.	18.5	20.5	8.0	11.5
Miami	18.5	20.5	8.0	13.5
Pensacola	18.5	20.5	8.0	11.5
Tampa	18.5	20.5	8.0	12.5
Lexington, Ky.	19.5	21.5	6.0	10.0
Covington,	18.0	20.0	6.0	11.5
Louisville	18.5	20.5	6.0	10.0
Paducah	18.5	20.5	6.0	10.0

In addition to the state tax of 6 cents Montgomery, Ala., has a county tax of 1 cent per gallon and a city tax of 1 cent per gallon on gasoline, and one-half cent per gallon on kerosene. Mobile and Birmingham, Ala., each have a city gasoline tax of 1 cent per gallon. Pensacola, Ala., has a city gasoline tax of 1 cent.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Dallas, Tex.	15.0	17.0	5.0	7.0
Fort Worth	15.0	17.0	5.0	7.0
Houston	15.0	17.0	5.0	8.0
San Antonio	16.0	18.0	5.0	8.0
El Paso	15.0	17.0	5.0	10.0
Muskogee, Okla.	16.0	18.0	5.0	8.0
Okla. City	16.0	18.0	5.0	8.0
Tulsa	16.0	18.0	5.0	8.0
Ft. Smith, Ark.	14.5	18.0	5.0	8.0
Little Rock	17.0	20.5	7.5	9.5
Texarkana	15.5	17.5	5.0	8.0

Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Atl'tic City, N. J.	14.0	17.5	4.0	9.0
Newark	13.3	16.8	4.0	7.5
Annapolis, Md.	14.8	18.3	5.0	10.0
Baltimore	14.3	17.8	5.0	8.5
Cumberland	15.8	19.3	5.0	12.7
Wash'g'n, D. C.	12.3	15.8	3.0	9.5
Danville, Va.	16.6	20.1	6.0	12.9
Norfolk	15.1	18.6	6.0	11.3
Petersburg	15.8	19.3	6.0	11.7
Richmond	15.8	19.3	6.0	11.7
Roanoke	16.8	20.3	6.0	12.9
Charles'n, W. Va.	15.0	18.5	5.0	12.6
Parkersburg	14.3	17.8	5.0	11.2
Wheeling	15.5	19.0	5.0	12.2
Charlotte, N. C.	17.5	20.5	7.0	13.5
Hickory	18.7	22.2	7.0	13.7
Mt. Airy	17.5	20.0	7.0	13.8
Raleigh	18.2	21.7	7.0	14.2
Salisbury	17.5	20.0	7.0	13.6
Charleston, S. C.	16.2	19.7	7.0	11.3
Columbia	16.0	21.5	7.0	13.2
Spartanburg	16.75	19.0	7.0	13.5

Tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at regular price less one-half cent. Discount for kerosene, 1 cent off tank wagon price for 25 gallons or more under contract (contract not necessary in Baltimore) except in New Jersey, where no discount is given.

Nebraska

STANDARD OIL CO. OF NEBRASKA

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Omaha	17.9	19.9	6.0	10.1
McCook	18.6	20.6	6.0	10.8
Norfolk	18.3	20.3	6.0	10.5
North Platte	18.7	20.7	6.0	10.9
Scottsbluff	19.4	21.4	6.0	11.6

Note: Discounts to dealers; where service station gasoline prices are (maximum overall, including rent) as follows: Reliance, 2½ cents; Standard Red Crown, 3½ cents; Red Crown Ethyl, 3½ cents.

Where service station gasoline prices are below normal resellers' allowances are reduced one-half of the amount below normal, down to the following (minimum overall, including rent): Reliance, 2 cents; Standard Red Crown, 3 cents; Red Crown Ethyl, 3 cents. Discounts to consumers for tank wagon deliveries covered only by Standard Commercial Consumers Contract, effective January 1, 1935.

Ohio

STANDARD OIL CO. OF OHIO

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Ohio points	17.0	19.0	5.0	*12.5

*Includes state tax of 1 cent, effective July 22.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
San Francisco	16.5	18.5	4.0	11.5
Los Angeles	11.5	13.5	4.0	10.5
Fresno, Calif.	15.0	17.0	4.0	12.0
Phoenix, Ariz.	20.0	22.0	6.0	‡18.0
Reno, Nev.	19.0	21.0	5.0	13.0
Portland, Ore.	19.0	21.0	6.0	13.5
Seattle, Wash.	19.0	21.0	6.0	13.5
Tacoma	19.0	21.0	6.0	13.5
Spokane	22.0	24.0	6.0	16.5

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Prices are at company's plant or depots, as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where discount is 1 cent.

‡Includes 5-cent state tax.

Pennsylvania, Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Philadelphia, Pa.	15.0	17.0	4.0	9.0
Pittsburgh	16.0	18.0	4.0	10.0
Allentown	15.5	17.5	4.0	9.0
Erie	15.0	17.0	4.0	9.0
Scranton	16.0	18.0	4.0	10.0
Altoona	16.0	18.0	4.0	10.0
Dover, Del.	15.5	17.5	4.0	10.0
Wilmington	15.5	17.5	4.0	10.0
Springf'd, Mass.	13.2	16.7	4.0	7.5
Worcester	13.3	14.8	4.0	7.5
Hartford, Conn.	12.3	15.8	3.0	7.0
New Haven	12.2	15.7	3.0	7.5
Providence, R. I.	12.0	13.5	3.0	7.0

Note—Tank wagon prices are those applicable to consumers purchasing lots of 100 or more gallons in one delivery.

Central South District

STANDARD OIL CO. OF LOUISIANA

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
N. Orleans, La.	17.5	21.0	‡8.0	†13.5
Baton Rouge	16.5	20.0	†7.0	12.5
Alexandria	17.5	21.0	††8.0	10.5
Lafayette	18.0	21.5	‡*8.0	12.5
Lake Charles	18.0	21.5	††8.0	12.5
Shreveport	16.0	19.5	†7.0	9.0
Knoxville, Tenn.	20.0	23.5	8.0	14.0
Memphis	18.0	21.5	8.0	11.0
Chattanooga	19.5	23.0	8.0	11.5
Nashville	19.0	22.5	8.0	12.0
Bristol	17.85	20.6	8.0	14.5

*Includes city tax of 1 cent.

‡Includes 2-cent parish tax. †Includes 1-cent parish tax.

Effective October 23, tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at dealer price less one-half cent.

Louisiana kerosene prices include 1-cent state tax.

New York and New England

SOCONY-VACUUM CO., INC.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Albany, N. Y.	14.9	17.7	5.0	7.5
*Met. New York	15.05	19.3	5.0	7.25
*Br'kl'n, Queens	14.8	18.8	5.0	7.25
Buffalo	13.5	16.0	5.0	8.0
Rochester	14.75	18.0	5.0	8.5
Syracuse	14.5	18.0	5.0	8.5
Boston, Mass.	13.0	16.5	4.0	7.0
Portland, Me.	14.75	18.5	5.0	7.5
Manch'ter, N. H.	14.8	18.3	5.0	7.75
Burlington, Vt.	16.2	19.7	5.0	8.5

*Includes 2 per cent city sales tax.

Canada*

Imperial 3-Star Gasoline

IMPERIAL OIL, LTD.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Hamilton, Ont.	22.0	25.0	6.0	17.5
Toronto, Ont.	22.0	25.0	6.0	17.5
Brandon, Man.	30.3	33.3	7.0	21.8
Winnipeg, Man.	28.7	31.7	7.0	20.2
Regina, Sask.	30.0	33.0	7.0	21.5
Saskatoon, Sask.	32.8	35.8	7.0	24.3
Edmonton, Alta.	32.2	35.2	7.0	23.7
Calgary, Alta.	29.5	32.5	7.0	21.0
Vancouver, B. C.	27.0	30.0	7.0	24.0
Montreal, Que.	20.5	23.0	6.0	17.0
St. John, N. B.	26.0	30.0	8.0	19.5
Halifax, N. S.	26.0	30.0	8.0	19.5

*Imperial gallon used in Canada.

In maritime provinces all dealers get 4 cents off service station price. In all other provinces open dealers get 3 cents off service station price and 1 cent additional to 100 per cent accounts, except Montreal City where open dealers get 2½ cents off service station price with 1 cent additional to 100 per cent accounts.

Naphtha

STANDARD OIL CO. (INDIANA)

	Tank wagon*
Oleum spirits	15.7
V.M.&P. naphtha	16.0
Cleaners' naphtha	15.0
Stanisol	15.0

*Prices include 3-cent Illinois tax, but not 1-cent federal tax nor 2 per cent retail occupational tax.

Prices f.o.b. Chicago, March 12, 1935. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Retail Price Changes

Standard Oil Co. (Indiana) July 16 reduced tank wagon gasoline one-half cent in Milwaukee; July 17, reduced station gasoline 1 cent in Milwaukee; July 24, reduced station gasoline 1 cent in Mankato; June 21, reduced tank wagon kerosene 1.8 cents in Quincy.

Standard Oil Co. of New Jersey July 23 advanced tank wagon gasoline 1.5 cents and station gasoline 2 cents in Salisbury.

Standard Oil Co. of California July 25 advanced tank wagon and station gasoline 2 cents in Fresno.

Imperial Oil Limited July 16 advanced tank wagon gasoline 2 cents and station gasoline 2.5 cents in Montreal.

Socony-Vacuum Oil Co., Inc., July 25 advanced gasoline posted dealer one-half cent and station prices 1 cent in New York City, with the exception of Staten Island, Boston and Providence, R. I.; posted dealer advanced one-fourth cent and station prices one-half cent in Maine on the same date.

Stocks of Crude Oil

Stocks of domestic and foreign crude petroleum at the close of the week ended July 13 totaled 317,045,000 bbls., according to data compiled by the Bureau of Mines, Department of the Interior. Compared with data for the previous week, this total represents a decline of 2,194,000 bbls.

Current reports for the week ended July 13 indicate that crude oil production increased but crude runs to stills declined.

STOCKS OF CRUDE PETROLEUM

July 13, 1935

(Barrels of 42 gallons)

Grade of crude oil—	July 13, 1935
Pennsylvania Grade	4,937,000
Other Appalachian	944,000
Lima-N. E. Indiana-Michigan	1,208,000
Illinois-S. W. Indiana	11,618,000
N. Louisiana and Arkansas	10,327,000
W. Texas and S. E. New Mexico	31,316,000
East Texas	28,366,000
Other Mid-Continent	142,899,000
Gulf Coast	24,130,000
Rocky Mountain	27,468,000
Californ'a	29,842,000
Domestic crude	313,055,000
Foreign crude	3,990,000
Total*	317,045,000

*Represents approximately 98 per cent of total stocks in the United States, exclusive of producers' stocks.

Market Record of Active Oil Stocks Listed on New York Stock Exchange

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City. Members New York Stock Exchange and New York Curb Exchange

1935 High	1935 Low	Week ended July 27 Sales	High	Low	Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
70¾	48½	3,800	64⅞	62⅛	62⅛	Amerada Corp.	788,675	N.P.	50cQ	7-31-35	$2.00	55⅝	39	47⅝	18½
28	21⅜	14,700	23⅝	22⅝	23	Atlantic Refining	2,664,904	$25	25cQ	6-15-35	1.00	35¼	21½	32½	12⅜
10⅜	5⅞	4,100	8¾	8⅛	8½	Barnsdall Corp. A	2,195,397	$5	....	5-11-31	....	10	5⅞	11	3
8¼	3⅜	34,300	7½	6½	7½	Columbia Gas & Elec.	11,610,036	N.P.	....	5-15-34	‡ .25	19¼	6⅝	28⅛	9
10½	6½	32,100	8	7⅝	7⅞	Consolidated Oil Corp.	13,996,072	N.P.	14c	10-31-34	.42	14¼	7¼	15⅜	5
23	15⅛	24,700	21½	19⅝	21¼	Continental Oil of Delaware	4,682,722	$5	12½c	4-30-35	.50	22¾	15¾	19⅝	4⅞
19⅛	11¾	3,300	18⅝	17⅝	18	General Asphalt	387,149	$10	....	6-15-32	....	23½	12	27	4⅝
3⅜	1½	1,200	2¼	2¼	2¼	Houston Oil (new)	1,098,618	$25	....	10-17-30	....	5⅝	2½	7⅜	1⅞
1⅞	½	1,000	½	⅜	⅜	Louisiana Oil Refining	1,302,158	N.P.	....	.....	....	3⅜	¾	4	⅝
13⅞	9½	8,100	11⅛	10	10⅝	Mid-Continent Petroleum	1,857,912	$10	15c	5-15-35	.50	14¾	9⅛	16	3¾
19	9	1,300	16⅜	15¼	15⅞	National Supply of Delaware	382,591	$25	....	5-15-31	....	21⅛	10	28⅝	4
14⅛	9¼	9,300	11½	10⅞	10⅞	Ohio Oil Co.	6,563,377	N.P.	15c	6-15-35	.45	15⅞	8½	17⅝	4¾
9½	6¾	500	7¼	7	7	Pacific Western Oil	1,000,000	N.P.	40c	11-30-34	.40	9⅜	5½	9½	3
1⅜	⅝	1,200	¾	½	½	Panhandle P. & R.	198,770	N.P.	....	.....	....	2½	⅝	4¼	⅝
23	13¾	20,500	21	19¾	20¾	Phillips Petroleum	4,154,687	N.P.	25c	8-30-35	1.00	20¾	13⅜	18¾	4¾
11⅝	6½	2,800	9¾	9	9¼	Plymouth Oil Co.	1,050,000	$5	25c	3-30-35	75c & 4% Stk.	16¾	7¼	17⅝	6¾
9¼	5⅜	14,600	8¾	8	8¾	Pure Oil Co.	3,038,370	N.P.	....	9-1-30	....	14⅞	6⅛	15⅝	2½
43¼	29½	1,400	42½	41½	42	Royal Dutch N. Y. shares	fl. 503,642,000	fl. 100	$1.70	8-1-35	1.35	39⅛	28⅝	39¾	17⅝
35⅞	20¾	2,900	29⅜	27¾	28½	Seaboard Oil of Delaware	1,244,283	N.P.	15cQ†	6-15-35	1.00	38⅜	20¾	43⅜	15
11½	5½	19,300	10¼	9⅛	10⅛	Shell Union Oil	13,070,625	N.P.	....	6-30-30	....	11½	6	11⅝	4
97	63⅛	1,300	94¾	90⅝	94¾	Shell Union Oil pfd.	400,000	$100	....	7-1-31	....	89	57	61	28½
18¾	13½	2,400	5½	5⅛	5⅜	Simms Petroleum	461,698	$10	$10 liq.	7-5-35	.55	17⅛	7¼	12⅜	4⅞
11⅜	6½	1,400	10⅛	9¾	10⅛	Skelly Oil	1,008,514	$25	....	12-15-30	....	11½	6	9⅞	3
15⅜	11	34,100	12⅞	12⅜	12¾	Socony-Vacuum	31,154,379	$25	15cQ	3-15-35	.60	19⅞	12½	17	6
38⅞	27¾	19,600	33½	32½	33	Standard Oil of California	13,102,900	N.P.	25c	6-15-35	1.00	42⅞	26½	45	19½
27¼	23	11,600	25⅞	25½	25¾	Standard Oil (Indiana)	15,215,677	$25	25cQ	6-15-35	1.00	32¾	23¼	34	17
32	26	No sales ..	..	..	..	Standard Oil of Kansas	200,000	$10	50cQ	10-31-34	2.00	41	26	39⅞	12⅜
50½	35¾	20,300	47⅛	45¼	46¼	Standard Oil of New Jersey	25,856,081	$25	50cSA‖	6-15-35	1.25	50½	39¼	47½	22⅜
75½	60½	900	70	68	70	Sun Oil	1,733,013	N.P.	25cQ	9-16-35	$1 & 9% Stk.	74¼	51½	59	35
23¾	16½	19,800	19	18¼	18¾	Texas Corp.	9,486,417	$25	25cQ	7-1-35	1.00	29⅜	19⅝	30½	10¾
6⅜	3¼	13,700	6⅛	5½	5⅞	Texas Pacific Coal & Oil	880,703	$10	....	12-31-29	....	6½	2½	6½	1⅜
12	7⅝	12,600	10¼	9¾	10¼	Tide Water Associated	5,631,341	N.P.	....	2-16-31	....	14⅜	8	11⅝	3⅛
102¼	84	2,100	100	99⅛	99¾	Tide Water Associated pfd.	666,524	$100	$3§	7-1-35	§8.50	87	64½	65¼	23½
20⅛	14¾	7,900	18	17¼	17½	Union Oil of California	4,386,070	$25	25cQ	5-10-35	1.00	20½	11½	23⅜	8½
26¼	20⅞	1,600	25¾	25	25	Union Tank Car Co.	1,200,000	N.P.	30cQ	6-1-35	1.20	25¾	15⅝	22¾	10½
2⅝	1	500	2⅛	2	2	Wilcox Oil & Gas	424,839	$5	....	5-10-28	....	5¾	2	5½	2

*Ex-dividend. †Plus extras. ‡Payable in preferred stock. §On account of accumulated and current dividends. ‖Dividend 4/75 Mission Corp. paid 3-15-35. ¶Dividend of one-half share Barnsdall Refining Corp

Market Record of Active Oil Stocks Listed on New York Curb

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City. Members New York Stock Exchange and New York Curb Exchange

1935 High	1935 Low	Week ended July 27 Sales	High	Low	Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
40	30½	200	39¾	39½	39½	Buckeye Pipe Line Co.	200,000	$50	75cQ	6-15-35	$3.00	38	26	39¾	25
4¼	1⅝	500	2¾	2⅝	2¾	Carib Syndicate	799,020	25c	....	.....	....	5½	1½	7¾	¼
157	115	250	136	133½	136	Chesebrough Mfg. Co.	120,000	$25	$1Q†	6-28-35	11.50	150	116	129	71
2¼	¾	14,300	1¾	1½	1⅝	Cities Service	37,804,394	N.P.	....	6-1-32	....	4¼	1¼	6¼	1½
1¼	½	6,100	1⅛	⅞	1	Colon Oil	2,200,000	N.P.	....	.....	....	3¼	½	4	⅛
⅞	¼	1,000	⅞	¼	⅞	Cosden Oil	399,687	$1	....	.....	....	3⅞	½	3⅞	1⅜
18⅞	10	6,000	16¾	15¾	16¼	Creole Petroleum	6,974,356	$5	....	.....	....	14⅝	9⅝	12	4¾
6⅝	4¼	700	5½	5	5	Darby Petroleum	509,696	$5	25c	7-15-35	.50	7½	4⅛	8	2⅛
2	¾	No sales ..	..	..	..	Derby Oil & Refining	263,162	N.P.	....	.....	....	2¼	1	2¾	⅞
38	34	250	35	35	35	Eureka Pipe Line	50,000	$50	$1Q	8-1-35	4.00	37	30	41¾	20
74¾	50¼	3,200	62½	60½	61	Gulf Oil Corp.	4,538,101	$25	....	10-1-31	....	76¾	49¾	62	24
64	44	3,300	57⅞	56¼	56¼	Humble Oil & Refining (new)	8,923,935	N.P.	25cQ	7-1-35	$1.25	49½	33¼	105½	40
22½	15⅜	8,800	19⅞	19½	19½	Imperial Oil of Canada	26,919,871	N.P.	25cSA†‡	6-1-35	.92½	17⅞	12⅝	15⅞	6½
6	3⅝	No sales ..	..	..	..	Indiana Pipe Line	300,000	$10	15cSA	5-15-35	.35	6⅞	3⅝	8	3⅛
39¾	28	9,400	35¼	33¾	33¾	International Petroleum	14,247,088	N.P.	75cSA†‡	6-1-35	2.28	33⅜	19⅜	23½	8⅝
9½	4⅜	7,800	7⅞	7	7⅞	Louisiana Land & Exp.	3,000,000	N.P.	....	.....	....	5	2⅛	2¼	⅞
6¾	3½	No sales ..	..	..	..	Lion Oil Refining	270,000	N.P.	....	10-27-30	....	6	3⅜	9½	1¼
6¼	4½	3,800	6½	6⅛	6⅜	Lone Star Gas	5,382,723	N.P.	15c	8-15-35	‖ .16	8⅜	4¼	11⅞	4¾
5½	4⅛	3,800	5¼	4⅞	5¼	Mountain Producers	1,682,182	$10	15cQ	7-1-35	.60	5½	4	6½	2½
18½	11¾	5,700	18⅜	18	18⅜	National Fuel Gas	3,810,183	N.P.	25cQ	7-15-35	1.00	18⅛	13⅛	20	10
10½	6¾	900	10⅛	9⅝	9⅞	National Transit	509,000	$12.50	40cSA	6-15-35	.75	9½	7	10	5½
2⅝	2	300	2⅝	2⅝	2⅝	New Bradford Oil	1,445,202	$5	10cSA	3-15-35	.20	2½	1¾	2⅛	½
2¼	1	200	1¾	1¾	1¾	New Mexico and Arizona	1,000,000	$1	....	.....	....	2¾	1	1⅞	½
3¾	3	No sales ..	..	..	..	New York Transit	100,000	$5	15cSA	4-15-35	.30	4¾	3	4⅞	3
7	5¼	No sales ..	..	..	..	Northern Pipe Line	120,000	$10	25cSA	7-1-35	.50	7	4⅝	6⅛	4¼
2⅛	1¼	6,000	2	1¾	1⅞	Pantapec Oil	1,608,700	N.P.	....	.....	....	2⅝	⅞	3¾	½
1½	⅝	100	⅞	⅞	⅞	Ryan Consolidated	296,931	N.P.	....	.....	....	3⅜	⅞	4¼	⅝
7½	4½	2,200	7	6¾	7	Salt Creek Producers	1,496,859	$10	20cQ	8-1-35	.80	7⅞	5½	9¼	3½
28¾	21⅝	2,200	24⅜	23¼	23⅜	South Penn Oil	1,200,000	$25	30cQ	6-20-35	1.20	26½	17½	22⅛	11
4¾	3⅞	No sales ..	..	..	..	Southern Pipe Line	100,000	$10	15cSA	9-3-35	.25	5½	3½	6	2⅛
52½	45¼	No sales ..	..	..	..	Southwest Penna. Pipe Lines	35,000	$50	$1Q	7-1-35	5.00	47	41	43	24½
21⅝	18	3,300	21⅝	20⅞	21	Standard Oil of Kentucky	2,604,790	$10	25cQ†	3-15-35	1.50	18⅜	14⅝	19¼	8⅜
12	7¾	200	10¼	10¼	10¼	Standard Oil of Nebraska	188,403	$25	....	6-20-34	.50	16⅞	8¼	20½	11
19⅜	11½	1,000	14⅛	13½	14⅛	Standard Oil of Ohio	753,740	$25	....	1-3-33	....	28½	12¼	41	15½
1¼	⅞	1,600	1¼	1⅛	1⅛	Sunray Oil	1,610,810	$1	....	4-15-31	....	2	⅟₁₆	1½	¼
6⅞	5	300	5¼	5⅛	5¼	Texon Oil & Land	336,028	N.P.	15cQ	6-29-35	.90	11	4⅜	13¾	6¼

*Ex-dividend. †Plus extras. ‡Payable in Canadian funds. §Includes 50 cents on old $25 par value stock. ‖Payable in preferred stock.

Note—In comparing highs and lows for the several years in the two tables, it will be necessary to take into consideration cases where there have been stock split-ups.

NEW OR IMPROVED EQUIPMENT

Long-Range Throttling Top Is "Tag" Valve Development

The latest valve development announced by C. J. Tagliabue Manufacturing Co., Park and Nostrand Avenues, Brooklyn, N. Y., is a long-range throttling top. This construction incorporates several new features of design. Particularly noteworthy is the arrangement for adjusting the spring pressure. The member in contact with the bottom of the spring does not turn when the adjusting feed screw is turned, but guided by the two vertical fins of the spider arms, merely moves up or down. This spring adjustment does not tend to wind up the spring or disturb its normal characteristic in any way whatsoever.

The importance of the valve as the business end of any control system and the need of matching the valve with the controller in precision and performance, gives special interest to this new development of the Tagliabue organization.

Severe Pressures Resisted by New "High-Yield" Casing

The A. O. Smith Corp. of Milwaukee, Wis., is now ready to supply the new "high-yield" casing, production having begun on 6⅝-inch and larger sizes. The casing will be made to A.P.I. standard dimensions. The company states that the product, which is cold-worked during manufacture, will have an exceptionally high yield point, making it better able to resist collapsing pressures.

The patented process is said to be an entirely new departure in this form of metal working. The compression yield strength has been raised to approach the ultimate tensile strength of the steel.

As to its field advantages, the engineers of the A. O. Smith Corp. say that in many cases lighter strings of casing may be run, and the same resistance to collapse attained and that the driller will be able to go to greater depths in larger sizes than heretofore. Complete detail as to the practical and scientific characteristics of the casing will be given in a bulletin prepared by the company. Branch offices of the A. O. Smith Corp. are now operating in New York, Tulsa, and Los Angeles, and an office is about to be established in Houston, Tex.

Bulletins, Booklets and Other Literature for the Trade

As a companion book to GEA-1731, "How to Make Cable Joints," issued last year, the General Electric Co. now has available a new publication, GEA-1839, "Cable Accessories." The two books should interest everyone engaged in the jointing and terminating of insulated cable.

Bulletin No. 54, announced by Marley Co., Kansas City, Mo., is a 48-page illustrated booklet giving detailed information about water-cooling equipment made by this company.

A 24-page booklet telling the owner, architect, engineer and contractor what each needs to know about electrical thermometers may be had by asking Leeds & Northrup Co., 4934 Stenton Avenue, Philadelphia Pa., for Bulletin 4001.

Natural Gas Equipment, Inc., Petroleum Securities Building, Los Angeles, Calif., offers a circular describing in detail its new N.G.E.-Nelson gas burners for oil-field boilers.

A 48-page catalog and price list ready for distribution by Bausch & Lomb Optical Co., Rochester, N. Y., covers microscope accessories.

W. L. Walker Co., 800 South Main Street, Tulsa, provides a circular describing the Master Gauge oil thief.

The story of "Diatoms and Celite" is told in the Power Specialist, published by Johns-Manville, 22 East Fortieth Street, New York.

Worthington Pump & Machinery Corp., Harrison, N. J., is sending on request bulletins on horizontal duplex piston pumps, type TB; vertical single air compressors, single stage, type V8; Monobloc centrifugal pumps; vertical angle two-stage air compressors, type VA-2.

Alemite Corp., Chicago, announces the revised midyear 1935 25-page Alemite powergun equipment catalog.

Processing engineers with the exacting problem of maintaining precision control of temperature, pressure, rate of flow or liquid level on continuous processes, involving time lags and load changes, should be interested in Bulletin 37R announced by Taylor Instrument Companies, Rochester, N. Y.

Men Widely Known in the Equipment Field

HARRY C. MOREHOUSE

Election of Harry C. Morehouse as vice president and sales manager in the machinery division of Emsco Derrick & Equipment Co. is announced by E. M. Smith, president and general manager. Mr. Morehouse has filled the sales managership for about a year and for eight years prior to that had been assistant to E. W. Goeser, vice president and manager of production. He is a graduate of the University of Colorado.

Fisher Agents Come from All Areas to Attend Meeting

The recent convention of Fisher Governor Co. representatives in Marshalltown, Iowa, headquarters of the company, was attended by agents from

J. H. Fisher and M. V. Cordell

every state of the union and from many Canadian provinces. M. V. Cordell was toastmaster at a banquet. The company, which now occupies a large, well-equipped building, began in 1880 with a little machine shop operated by William Fisher, father of the present president, J. H. Fisher, and George Beebe. William Fisher had been engaged by the city council to run the municipal water works. He designed and patented the Fisher pressure-type pump governor. Patents on improvements were obtained later. Mr. Fisher and Mr. Beebe formed a partnership to manufacture the new control device, using the machine shop which had been previously established by Mr. Beebe.

Ingersoll-Rand Impact Wrench Has Reversible Feature

The Ingersoll-Rand Pott impact wrench, announced by Ingersoll-Rand Co., 11 Broadway, New York, operates on an entirely different principle, that of "impact," and can now be furnished with a reversible mechanism, so that it can be used both for applying and removing nuts. The reversing is accomplished by shifting gears instead of reversing the air motor. This method was adopted because of nonreversible multi-vane motor uses about one-third less air than a reversible motor of comparative size. It also prevents accidental reversing, thus adding to the safety of the wrench.

Another feature is the air cooling of the accumulator, which prevents overheating and results in much longer life. This wrench runs nuts on or off at a speed of approximately 600 to 700 r.p.m. and 1,200 to 1,400 impacts per minute, tightening or loosening as the case requires.

New Self-Aligning Idler

The Link-Belt "positive" self-aligning antifriction idler for troughed conveyor belts, is announced by Link-Belt Co., Indianapolis, Ind., as a new and improved type of self-aligning idler, perfected in actual service. Conveyor belts should run practically central with their carrying or supporting idlers, to avoid possibility of injury to the belt edge in running against chutes, etc., if too much out of line. This condition may be automatically corrected by providing self-aligning idlers at intervals, to "train" the belt back auto-

matically into a central position on the carrying idlers.

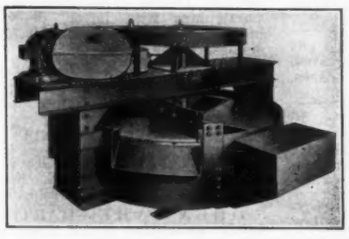
The "positive" self-aligning idler is made up of standard belt carrying rolls mounted in a supporting frame provided with arms extending parallel with and, at the sides of the belt, on which "actuating rolls" are mounted for the purpose of swiveling the idler frame promptly when the crooked-running belt crowds sidewise enough to engage either of them. This troughing idler frame is supported by an antifriction pivotal bearing, which is carried on a cross member or subframe bolted to the conveyor stringers.

Device for Dewatering Sand Is Announced by Link-Belt

The Link-Belt dewatering rotoscoop is announced by Link-Belt Co., Chicago and Philadelphia, for recovering fine or coarse sand and similar material. The new machine fills the needs for a sand dewatering device capable of recovering the available sand grains, of sufficient fineness to meet specifications, and discharging the product dry enough to permit truck transportation, or mechanical conveying to and from storage. It is suitable for treating other materials.

The rotoscoop is a self-contained machine consisting essentially of a large circular steel tank into which the water and the materials to be treated are introdced; a slow-moving power-driven suspended rotating disc to the underside of which are attached inclined adjustable renewable scoops for moving the material within the tank; a curved-steel ajustable renewable plow mounted in a stationary position above the rotating disc, for plowing off and discharging the dewatered product ready for use; and the necessary driving machinery mounted above the tank on the same steel supports from which the rotating disc is suspended.

The machine is made in 15-, 12-, 9- and 6-foot diameters, with capacities which range from 20



to 150 tons an hour, based on material weighing 100 pounds per cubic foot.

The driving machinery consists of an electric motor, an encased automatic-lubricating silent chain drive, an enclosed worm-gear reducer, and a pair of spur gears with steel guards, all compactly arranged and mounted on a substantial steel beam over and from the steel tank, thus making the entire dewatering rotoscoop a self-contained unit requiring minimum space and foundations or supporting structure.

National Supply Adds to Its Pumping Equipment Line

The National Supply Co. has added Types TH-800 and THD-800 unit pumpers to its line of pumping equipment for the oil field.

These pumpers are complete, compact and self-contained units said to be capable of doing the

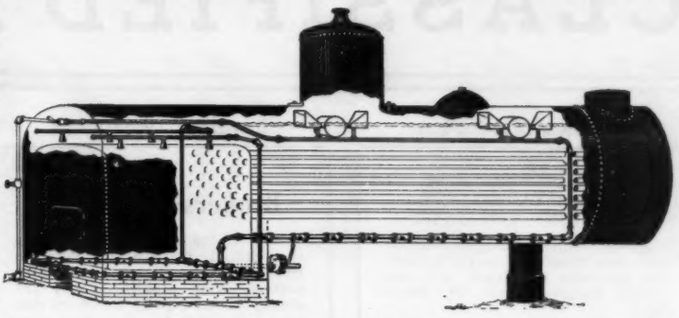
work of the heaviest standard rigs. They are adaptable to a wide range of pumping conditions and several types of installations. They are mounted on a base high enough to permit installations on derrick floors. The cranks clear the floor without a foundation. If desired this pumper can be installed on concrete foundations with or without the base.

Single or double reduction gears are available for low-speed single-cylinder engines, high-speed multi-cylinder engines or electric motors with either flat belts or V-belts.

The high horsepower ratings and strong, rugged construction of these pumpers, according to the manufacturer, make them ideal installations in fields where proration tests are taken. Bulletin No. 72, describing these new pumping units, will be sent upon request.

Cleaner Removes Scale, etc., Without Chemicals

U. S. Oil Tool Corp., Houston, Tex., is producing and selling a mechanical boiler cleaner for eliminating scale and removing foam and mud while the boiler is in operation, without the use of chemicals. The cleaner utilizes the internal steam pressure in the boiler to force out impurities which rise and settle in the water. Opening of a blow-off valve expels undesirable sediment after the cleaning mechanism has freed it.



The unit consists of two floating skimmers and a gathering line. The former is connected to an outlet on which is placed a valve outside the boiler. When this valve is opened, internal steam pressure forces all scum from the top of the water through the intake cup to the outlet line. Removing this scum eliminates the formation of scale and prevents the foaming condition.

The gathering line consists of a series of cast-iron crushers, each with an opening in the bottom, and connected by nipples. When the blow-off valve is opened, internal steam pressure forces all sediment on the bottom of the boiler to the openings in the crushers and from there carries it out through the blow-off, which need be opened only a few seconds, at about two-hour intervals. This carries off mud, sediment and old scale which has checked off and dropped to the bottom. By eliminating the formation of new scale in the boiler, the old scale checks and cracks off through the expansion and contraction of the metals. The crushers in the gathering line gradually break up the larger pieces of scale and carry it out with the blow-off.

The siphon cups installed over the crown sheet take up any sediment around the crown sheet and carry it out through the blow-off.

Will Make Drilling Mud

Tulsa Earth Products Co., with offices at 614 National Bank of Tulsa Building and plant at 13 North Oswasso Avenue, Tulsa, is manufacturing a drilling mud for the oil industry, and an admix for concrete. Officers are Elfred Beck, president; D. R. Howard, vice president, and N. C. Beck, secretary and treasurer.

Here and There With Men Who Manufacture Equipment

Black, Sivalls & Bryson have established a branch in Alma, Mich., in charge of W. H. Price, formerly of Oklahoma City, and Vern Palmer, formerly of McPherson, Kans.

Stahlman Lumber Co.'s Gulf Coast district headquarters in Houston entertained 200 oil men with a barbecue recently at Dr. T. S. Falvey's Sleepy Hollow Lodge, near Conroe Field. Entertainment was arranged by Harold Bell, assistant general manager of Stahlman's 10 oil field stores.

The Philadelphia district sales office of Republic Steel Corp. and subsidiaries, Berger Manufacturing Co. and Union Drawn Steel Co., has been moved from the Fidelity-Philadelphia Trust Building to the Broad Street Station Building, 1617 Pennsylvania Boulevard. J. B. DeWolf continues in charge of the sales office.

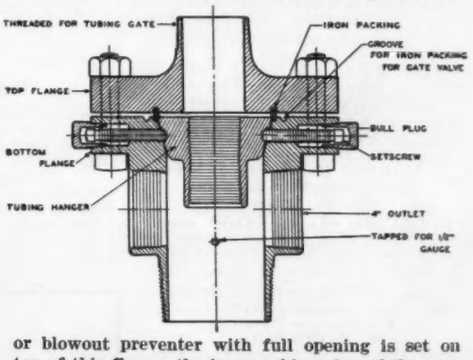
J. W. Barnett, recently director of the division of construction and finance of the U. S. Shipping Board, has joined Babcock & Wilcox Co.'s marine department, it is announced.

Kennedy Valve Manufacturing Co. has appointed Thomas C. Swope as its Texas and Louisiana representative, with headquarters at 863 Fifth Street, Beaumont, Tex.

Rector Develops Tubing-Head for High-Pressure Areas

A new design of forged-steel high-pressure tubing-head has been introduced by the Rector Well Equipment Co., Inc., Fort Worth, Tex. It is 6,000-pound test, and is being made available in cast steel construction for 3,000-pound test. It is said to offer added safety and convenience in handling tubing strings in high-pressure areas.

The bottom flange is applied to 7-inch casing when the latter is set. Standard 7-inch gate valve



or blowout preventer with full opening is set on top of this flange, the iron packing ring of the gate valve serving to pack off while drilling in and running tubing string. The mandrel type hanger is placed on the top end of the tubing, after it is run, and lowered through the gate valve and preventer, using landing nipple to a metal-to-metal or ground joint seat. Four set screws hold it in place, and the ground joint seat eliminates the flow between casing and tubing. The fact that the tubing is blanked while being run makes it possible for the gate valve and preventer equipment to be removed and the top flange applied.

Takes Over Isometer

A new development in flow meters, the Isometer, has been taken over by the Elgin Softener Corp., Elgin, Ill. This instrument, which uses a variable orifice principle of operation for the measurement of steam, water, oil, and other liquids and gases, was developed by the Isometer Corp., of Milwaukee, Wis. This organization will now be operated as a division of the Elgin Softener Corp.

Executive offices and manufacturing facilities of the new division will be in Elgin. The Isometer division will manufacture and sell the meters and the executive personnel of the Isometer Corp. will be identified with the Elgin Softener Corp.

CLASSIFIED ADVERTISING

Royalties—Production

HAVE MARKET FOR SUBSTANTIAL PRODUCING ROYALTIES

Exceptionally high immediate return not essential—prefer properties partially developed, with excellent future—must be priced right.

We file all requirements with Federal Securities Commission and convert your royalties into cash promptly.

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Tulsa, Oklahoma.

PRODUCING OIL ROYALTIES
Bought (Wholesale) Sold.
Inquiries invited from Oil Companies, Bankers, Dealers.
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20 Broad St. New York.

VAN POOL — EAST TEXAS
Bought — Sold — Wholesale.
W. R. Brown & Co., Inc.
14 Prospect Pl., East Orange, N. J.

HIGH GRADE producing oil and gas royalties offered to dealers. Billie Smallwood, P. O. Box 2261. Tulsa, Okla.

BETTER CLASS MONTHLY PAYING ROYALTIES
Quoted Dealers Exclusively.
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PRODUCING OIL ROYALTIES
for dealers.
H. P. BOWEN
842 Kennedy Bldg., Tulsa, Okla.

OIL REPORT SERVICE
Specimen and Particulars on Request.
OIL INFORMATION BUREAU
501-04 Petroleum Bldg., Okla. City, Okla.

Producing Oil Royalties
at wholesale.
ROBERT L. KINKAID, INC.
Petroleum Bldg., Oklahoma City, Okla.

DEALERS IN ODD LOTS
EAST TEXAS AND VAN POOL
PRODUCING OIL ROYALTIES
We Buy and Sell.
E. T. MARION REAL ESTATE CO.
401-2 Slaughter Bldg.,
Dallas, Texas.

PRODUCING OIL ROYALTY paying monthly income in half acres and upwards at reasonable prices. Federal listed. S. J. Jewell, P. O. Box 35, Tulsa, Okla.

Producing and Non-Producing Royalties, Bosco, Van, Rodessa, West Texas.
Wholesale — Retail
W. E. HOUSEL
56 Pine Street, New York City.

NEW OIL OFFERING
will presently be made with attrac. features for investors and dealers. Reliable dealers invited to communicate. ORAS A. SHAW, Kennedy Bldg., Tulsa, Okla.

FOR SALE: 1 to 5 acres of royalty on proven structure in Lincoln County, Oklahoma, $150.00 per acre, also a 1/8th interest for sale under well just proven as Wilcox producer. Interest is for sale to complete the well. Investigate this ad. W. M. Gallagher, Hersk. Building, Oklahoma City, Oklahoma.

Income Producing Royalties
Mid-Continent Field
Harry A. George
427 Perrine Bldg., Oklahoma City, Okla.

CALIFORNIA OIL ROYALTIES
Dealers Only
Signal Hill—Huntington Beach
Kettleman Hills
RICHARDS & COMPANY
630 So. Spring St., Los Angeles, Calif.

PRODUCING OIL ROYALTIES
(ALL FIELDS)
Bought, Sold and Quoted.
HENRY L. BAKER CO.,
207 Van Nuys Bldg.,
Los Angeles, Calif.
Telephone Trinity 7391.

1,000 ACRE drilling block. North trend of Hobbs Pool. About 8 miles from production. Box 778, Hobbs, Lea Co., N. M.

Royalties—Production

Brokers—Salesmen

Sell in the most active area in the United States—The Permian Basin of West Texas and Southeastern New Mexico. From the standpoint of royalty investors this area has much to offer. Can supply you with choice non-producing royalties located on geophysical highs. Also drilling blocks, close in acreage to production, or wildcat leases. I maintain my own field men who cover this area for me. All offerings meet the requirements of the Securities and Exchange Commission. Inquiries invited.

B. D. BUCKLEY
Paul Brown Bldg. St. Louis, Mo.

ANDREW J. BARRETT
The Philtower
Tulsa, Oklahoma.

Van—East Texas—Louisiana Royalties
Bought—Sold.
WILLIAM MONROE LAYTON
67 Wall St., Suite 1510, New York City.

GULF COAST ROYALTIES
Bought and Sold.
Producing and non-producing royalties in salt dome fields of Texas and Louisiana.
ZENI OIL COMPANY
412 Esperson Bldg., Preston 4420.
Houston, Texas.

J. A. WOLF AND COMPANY
105 West Adams Street
Chicago, Illinois.
Dealers in Oil Royalties since 1918.

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REGISTERED PATENT ATTORNEYS
United States and Canada
Before disclosing your invention to anyone, send for blank form:
"Evidence of Conception."
Instructions "How to Establish Your Rights" and complete information FREE!
LANCASTER, ALLWINE & ROMMEL
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Royalties—Production

Registered Royalties and Non-Registered Royalties available to Dealers only.

CHESTER IMES
First National Building,
Oklahoma City, Okla.

Leases—Production

MR. WILDCATTER OR PROMOTER
I have a 10,000 acre block of leases on the best structure in the State of Alabama. This is a faulted dome, and commercial gas has already been struck on the low side of the fault. Evidence of commercial oil and gas from six different horizons ranging from 1,000 feet to 2,750 feet. Leases are all new ten year leases, bearing ten cents rentals. Greatest opportunity for promoter or wildcatter in the South today. Structure worked out in detail by one of the greatest geologists in South today. If you can finance the drilling of a wildcat well, this is the greatest set-up you have ever had. F. P. Borden, Box 427, Amory, Miss.

SINCLAIR-PRAIRIE'S deep wildcat Southern Okla., Leases and Royalty $1 an acre and up. E. Croft, Proctor, Texas.

HAVE located a number of oil and gas pools in this territory. Capital solicited, for drilling, for an interest in leases. E. T. CAMP, Gadsden, Ala.

SEVERAL LEASES 50 ct. rental 10 year term, Ness and Trego Counties, Kansas. 10 and 20 year term Royalty near Vickers Trego location. Buxton, Ransom, Kansas.

WILL BUY or sell, oil leases and royalties Southeast New Mexico. I follow surveying in the field, and familiar with this territory. Olen F. Featherstone, 201 Bassett Tower, El Paso, Texas.

NEW MEXICO Oil and Gas Leases and royalties. Send 50 cents in stamps for new State Oil Map of New Mexico. Roy G. Barton, Clovis, New Mexico.

Leases—Production

NEW MEXICO—My weekly scout report furnishes complete and reliable information on New Mexico developments. Send for copy. W. S. Patterson, Santa Fe, N. Mex.

HAVE 5,000 ACRES of oil and gas leases on well defined structure in Union County, New Mexico. Well will be drilled by Quaker State Oil Co., location now made, drilling will start shortly. Will sell part or all to brokers at wholesale price for resale.
L. W. TARKENTON & CO.,
Box 1576 Pampa, Texas.

NO. 30 SPECIAL Star Drilling Machine. Will rent for interest in block. C. W. Smith, Lamont, Oklahoma.

FOR SALE—40,000 acres oil leases in Kit Carson, Cheyenne and Kiowa Counties, Colo., 10 yr. leases 25c per acre rental, rentals paid for 1 yr. I furnish leases anywhere in Colo. or Kans. A. P. Tone Wilson, Burlington, Colorado.

OIL Leases, Royalties, near production, Darrow and other La. fields. Fifteen hundred acres, Salt Dome, checkerboarded Major Companies, 1/8 interest well and drlg. blk. $10 ac. Immed. accept. Edward Adey, 101 Levert Bldg., New Orleans, La.

FOR SALE: Leases and royalties in the new Rodessa field near Shreveport; also producing properties and drlg. blks. in Louisiana and Texas. G. Lucas, 1819 Magnolia St., Shreveport, La.

Business Opportunities

WILL DRILL proven acreage for fair equity. Desire early start so state full particulars first letter, depth, volume, market, etc. H. A. STEBINGER, Nacogdoches, Texas.

BIG Inducement to finance completion of well near production. M. S. Dickson, 405 Maverick Bldg., San Antonio, Tex.

Incorporations

CHARTERS — Delaware best, quickest, cheapest, most liberal. Free Forms. Colonial Charter Co., Wilmington, Del.

DELAWARE CHARTERS — Fee small; submitted forms. Chas. G. Guyer, 901 Market Street, Wilmington, Del.

Situations Wanted

MACHINERY sales executive desires position dist. mgr. preferably New York or Mid-Continent; 15 yrs. experience pipe line, refining and production. Activities covered entire United States and Europe. Understands export sales. References former employes and oil company executives. Now employed. Address Box G-760, The Oil and Gas Journal, Tulsa, Oklahoma.

Help Wanted

MANUFACTURER offering high grade chemical and mechanical service has opening for A-1 representative calling on oil industry. Profitable line. Commission. State lines now carried and territory covered. Address Box G-762, The Oil and Gas Journal, Tulsa, Oklahoma.

MALE HELP WANTED—Designing Draftsman experienced in oil refinery work. Give age, education and experience. Address Box G-771, The Oil and Gas Journal, Tulsa, Okla.

Experienced oil field machinery salesman wanted. Permanent position. State age, exp. and salary expected. Excellent chance for advcmt. Address Box G-764, The Oil and Gas Journal, Tulsa, Okla.

Assistant Sales Executive with Supply Store and Contractor acquaintance. Established line. Drawing acct. and comm. App. by letter only stating exp., edu. and income expected. Box 224, Shawnee, Okla.

PET. ENGR. exp. in lub oil and compounding greases. In writing give complete information. Address Box G-782, The Oil and Gas Journal, Tulsa, Okla.

EXP. oil-field equip. salesmen wanted in all active districts. An excellent opportunity for the right man. State age and experience in first letter. If you can sell—we want you. Address Box G-781, The Oil and Gas Journal, Tulsa, Okla.

CLASSIFIED DISPLAY RATES

Classified Display is set with a border and may be used in one or two column sizes.

1 Inch	*1 time*	*$5.00*
1 Inch	*13 times*	*4.50 per inch*
1 Inch	*26 times*	*4.00 per inch*
1 Inch	*52 times*	*3.50 per inch*

This space may be contracted for over a period of one year from the date of the first insertion and is PAYABLE IN ADVANCE, MONTHLY

CLASSIFIED RATES

Classified advertising rates: First insertion, 35 cents a line; each additional insertion, 25 cents a line. PAYABLE IN ADVANCE. Six words usually make a line. Count as a word each one-letter word and each group of figures. White space computed at regular line rate. Allow two extra lines for blind ads. Ads of less than three lines not accepted. No formal acknowledgment is made, and proofs cannot be shown in advance of publication.

	1 time	2 times	3 times	4 times
3 Lines	*$1.05*	*$1.80*	*$2.55*	*$3.30*
4 Lines	*1.40*	*2.40*	*3.40*	*4.40*
5 Lines	*1.75*	*3.00*	*4.25*	*5.50*
6 Lines	*2.10*	*3.60*	*5.10*	*6.60*
7 Lines	*$2.45*	*$4.20*	*$5.95*	*$7.70*
8 Lines	*2.80*	*4.80*	*6.80*	*8.80*
9 Lines	*3.15*	*5.40*	*7.65*	*9.90*
10 Lines	*3.50*	*6.00*	*8.50*	*11.00*

We reserve the right to withhold all advertising of questionable character. To avoid delay be sure to send remittance with copy. We will set your ad in the smallest amount of space possible and refund all overpayments. One-time insertions will not be run until fully paid. Forms close MONDAY NOON before each issue date.

THE OIL AND GAS JOURNAL
Tulsa, Oklahoma